

ENGINE STORAGE

TA

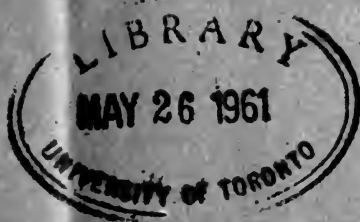
27

T7A2

1885



Engineering



REPORT

— OF THE —

CITY ENGINEER

— OF —

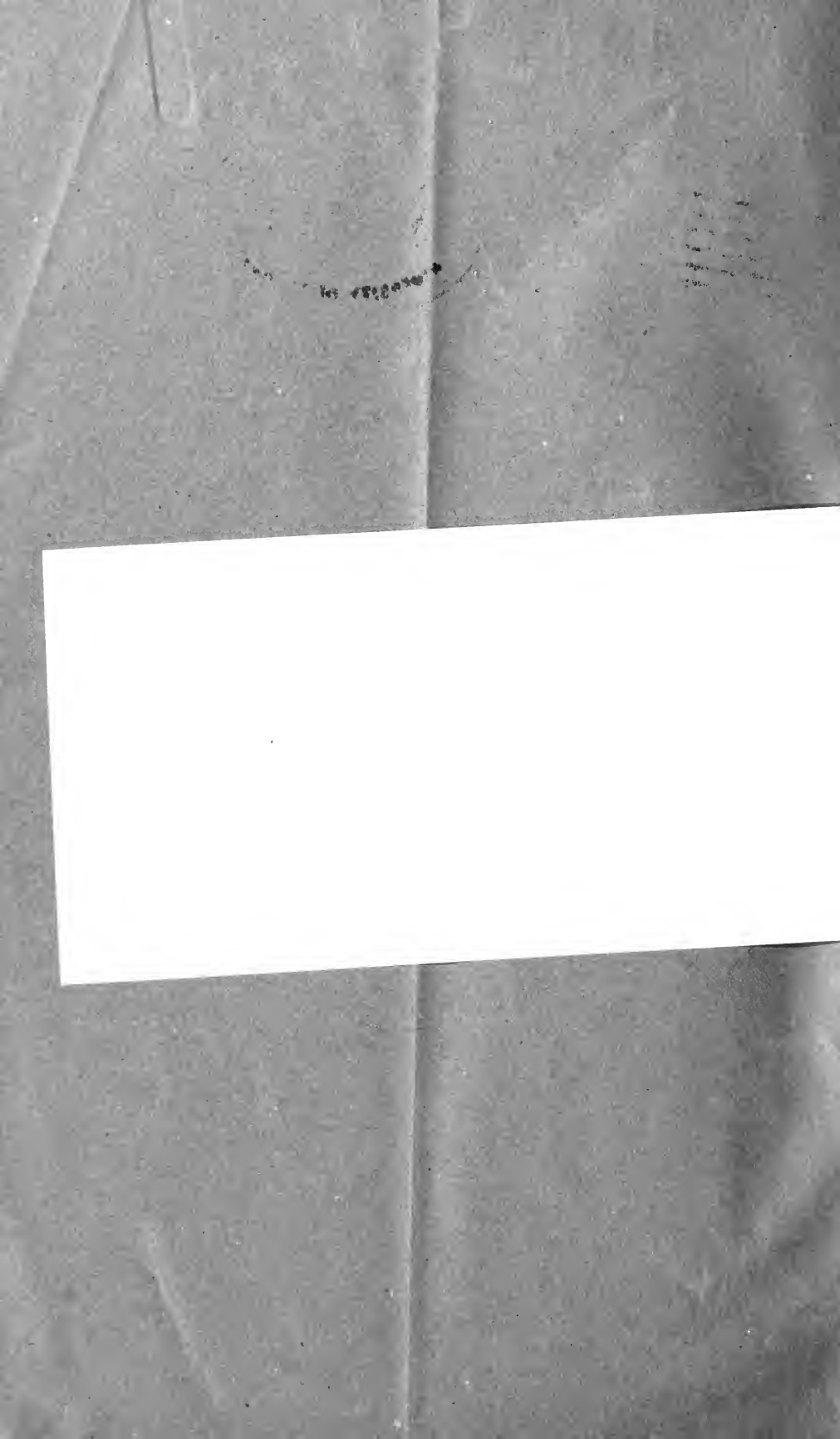
WORKS PERFORMED,

— AND —

EXPENDITURE FOR THE SAME,

— FOR THE —

YEAR ENDING DECEMBER 31ST., 1885.



REPORT
— OF THE —
CITY ENGINEER
— OF —
WORKS PERFORMED,
— AND —
EXPENDITURE FOR THE SAME,
— FOR THE —
YEAR ENDING DECEMBER 31ST., 1885.

THE
LIBRARY
OF THE
MUSEUM
OF
COMPARATIVE ZOOLOGY
AND
ANATOMY
OF THE
MUSEUM OF
COMPARATIVE ZOOLOGY
AND
ANATOMY

Annual Report of the City Engineer.

CITY ENGINEER'S OFFICE,

TORONTO, March 1st, 1886.

To His Worship the Mayor and the Council of the City of Toronto :

GENTLEMEN,—I beg to submit the usual Annual Report, with a Statement of the work carried out during the year 1885, with the amounts expended in the several services belonging to the Works Department.

The total expenditure during the year amounted to..... \$412,841 66

General Street Appropriation :

General Purposes.....	\$31,439 05	
Roadways.....	30,000 00	
Sidewalks	52,335 36	
		<u>113,774 41</u>

Expenditure on Special Service :

Garrison Creek sewer.....	\$52,240 76	
Winchester Street bridge.....	425 00	
Yonge Street Tannery Hollow improvements.....	1,712 00	
Yonge Street Avenue block pavement.....	10,267 00	
		<u>\$64,644 76</u>

Expenditure on Local Improvements :

Sewers	73,750 66
Block pavements	157,581 25

Sidewalks:

Yonge Street, north of Bloor Street.....	\$886 55	
Elliott Avenue.....	418 83	
Sussex Avenue.....	73 55	
		<u>1,378 93</u>

Dressing and re-laying Yonge Street stone flagging	\$1,711 65
--	------------

\$412,841 66

The following is a detailed statement of the general street expenditure :

General Purposes:

Appropriation.....	\$29,100 00
From surplus College Avenue pavement appropriation.....	1,500 00
Amount received for stone.....	185 00
Amount received for sundries.....	7 80
Amount on hand at commencement of year.....	645 00
	<u>\$31,439 03</u>

Expended on labor.....	\$22,951 50	
Repairing tools.....	371 56	
Ironwork.....	1,406 65	
Cement.....	294 51	
Cedar blocks.....	83 75	
Brick, sewer pipe and sand.....	1,839 44	
Horse hire.....	212 50	
Sundries.....	1,130 78	
Engineering instruments and repairs.....	153 61	
Surveys.....	471 50	
Hardware, spikes, nails, &c.....	429 29	
Extension of sewer, wooden box, West Market St..	509 95	
Trees and planting.....	125 00	
Culvert on Bloor Street.....	128 00	
		<u>\$30,108 04</u>

Balance on hand..... \$1,331 05

Roadways :

Appropriation.....		\$30,000 00
Expended on labor.....	\$ 8,866 80	
Stone breaking.....	6,334 74	
Stone.....	10,298 57	
Repairs to tools.....	122 45	
Dressing curb stone.....	47 28	
Culvert on Bloor Street.....	272 00	
Gravel.....	279 00	
Material for filling in crossings.....	7 00	
		<u>\$28,752 84</u>

Balance on hand..... \$1,247 16

Sidewalks :

Appropriation.....	\$48,800 00	
Balance on hand.....	1,462 69	
Transferred from Markets and Health (fees).....	1,000 00	
Surplus cedar block pavement, College Avenue..	1,073 00	
		<u>\$52,335 69</u>

Expended :

Labor.....	\$13,002 79	
Lumber.....	31,340 39	
Spikes and nails.....	2,012 21	
Allowance on improved sidewalk.....	384 51	
Contracts, Bullivant & Nasmith, for laying sidewalks	1,993 76	
Contract with Mr. Pollock, re-laying and renewing		
Yonge Street sidewalk (stone).....	1,471 65	
		<u>50,215 36</u>
Balance in hand.....		<u>\$290 33</u>

At the close of the year the Account shows a balance to the credit of the Department, amounting to \$2,868.50, to cover all outstanding accounts, leaving a small credit balance.

Ten thousand two hundred and ninety-eight dollars and fifty-seven cents have been expended for the purchase of stone for general street repairs. A contract was entered into with A. W. Godson for the quantity required for the western division of the City, and with W. Goldring for the eastern division of the City, respectively; the total cost, including breaking, being \$16,633.31. In addition to this a quantity of gravel was purchased for repairs to Eastern Avenue, Kingston Road (Queen Street), and Danforth Avenue. The total amount of the expenditure on general street maintenance was \$30,000. (See Appendix for stone attached.)

SIDEWALKS.

It has been the practice for the City to lay down all sidewalks. In the western division, this work was carried on by the Ward Foremen in the respective Wards; and in the eastern division a gang of men was employed on the work. It was decided by the Committee of this year to abandon this method of proceeding with the work, and to call for tenders for the work of putting down the sidewalk, the City to provide all material, lumber, nails, &c., and to do the necessary grading, and to remove any old walks. The lowest tender was that of Messrs. Bullivant & Nasmith, viz.:

Tender for 4 foot sidewalk, \$14.20 per thousand feet B.M.

"	6	"	"	13.70	"	"	"
"	8	"	"	13.50	"	"	"
"	12	"	"	13.20	"	"	"

The above being the charges for material delivered.

The contract has been carried out in a satisfactory manner, and I believe the method of doing this work will be in the interest of the citizens, and I am of opinion that the method can be further extended by including the material required for the walks in the contract, the City only to remove the old walks and grade the site.

The flag pavement on Yonge Street, from King Street to Front Street, which had for some time been in a rather dangerous state, owing to the number of broken flags, has been taken up and relaid. The flags were taken up, squared and dressed in good manner, and relaid, the broken ones being replaced by others. This work was done by contract, costing the sum of \$1,711.65, as will be seen by referring to the details of expenditure.

A recommendation has been made for a stone flag sidewalk on the south side of King Street, from West Market Square to York Street, thence along York Street south to Millstone Lane, the City taking the initiative; and no opposition has been given to the work. Specifications have been prepared and tenders for the work will be called for at an early date.

For a detailed statement of work done under this heading see Appendix B.

GARRISON CREEK SEWER.

A contract was made with Mr. A. J. Brown for the construction of the lower portion of the sewer, from Wellington Avenue to the outlet into the lake. The greater portion of the sewer is circular, 8 feet in diameter. The section under the railway tracks, owing to the limited headroom was segmental. About 26 lines of rails, in constant use, were crossed, the tracks being supported by stringers. The whole of this work was carried out without a single train being delayed.

The contractor's price for the whole of the work was \$32,848. This included a stone head at the lake. This work was commenced in August, and it is expected that it will be connected with the portion already constructed and completed early in the coming year.

The work on the section from Givins Street to College Street is, I regret to say, not yet finished. Many causes have delayed this work; amongst others, the strike among the men in the early part of the year, when some six weeks were lost. I do not expect the work to be taken off the contractor's hands until late in the spring. I have attached a plan of the section and a few details of the work, the approximate cost of which is \$14,900.

SEWERS.

During the year 13,826 lineal yards ($7\frac{8.5}{100}$ miles) of sewers were constructed, including those of all descriptions, at a cost of \$115,791.41.

Brick sewers—4,469 lineal yards	\$75,306 91
18 inch pipe—4,455 lineal yards.....	21,004 00
15 inch pipe—3,652 lineal yards.....	15,290 25
12 inch pipe—1,250 lineal yards.....	4,190 25
	<hr/>
	\$115,791 41

This increases the mileage to $115\frac{10}{100}$.

When making repairs to sewers during the year faults were found, and in one or two cases of pipe sewer it was found necessary to re-construct them. Hazelton Avenue and Yorkville Avenue sewers must be re-constructed. The pipes in these and in those already repaired were found to be saturated with sewage and weakened, and the greater portion of the pipes were broken, causing a stoppage of the flow. In consequence, the Committee on Works expressed a doubt as to the durability of pipes, and it was decided that $4\frac{1}{2}$ inch brick sewers, oval in shape, should take the place of 18 inch and 15 inch tiles. Since this order was issued I have as far as possible carried it out. Only one sewer of this class has as yet been laid in. This was on Sussex Avenue, the sub-soil being a stiff clay. In a soil of this kind these sewers will answer very well, but I have doubts as to the stability of a sewer of this description if laid in sandy soil, more especially if it should be wet and of the nature of a quick sand which we have in so many localities within the City limits, and to construct a sewer of this description with a bad

foundation the invert must be laid either of 9 inch work or a foundation must be provided of such a description as to insure against breaks in the works when in the course of construction or after its completion. In some cases it will also be necessary to strengthen the crown of the sewer at the haunches. A filling of concrete is what is generally used.

The amount spent on general sewer repairs and flushing, paid from the General Purpose appropriation, is \$6,601.16, and for constructing and reconstructing manholes, culverts, &c., when permanent roadways are being constructed, \$4,284.15. (For a detailed statement of this work, see Appendix C.)

There are now contracted for 2,776 miles of sewers, and they will be proceeded with as early as possible in the spring. (See Appendix F.)

I have also appended a list of all sewers laid down within the City limits, with their size, length, description and cost.

PRIVATE DRAINS.

During the year ending December, 1885, the large number of 1,195 permits for private drains were issued. These were constructed by the Department at a cost of \$19,358. There were 9,896 yards of 6 inch, 1,695 yards of 9 inch, and 72 yards of 12 inch drains constructed during the year.

The City is divided into three districts for the carrying out of the work. Each district has an Inspector, whose duty it is to attend to the putting in of private drains. The work is done under a contract, the contractor finding all material and completing the drain.

The question of constructing private drains, from the sewer to the street line, when the sewers are being constructed, and the cost made payable concurrently with the payment of the sewer, was brought before the Council by one of its members. I do not know whether it met the views of the Council or not, but I am of opinion that in a great many instances it can be carried out with the very best sanitary results. Many of our citizens are debarred from drainage for the want of cash to pay, as at present required for house drains, and this would be a means of relief which I am certain many would take the advantage of; and I hope the Council will see its way to adopt this or some other scheme having the ends in view.

The state of Queen Street east during the fall calls for some attention on the part of the Council. A tramway laid down by the Gravel and Concrete Company takes up a portion of the south side of the street. The Company entered into an agreement for this portion of the street, and got a charter from the Ontario Government giving the Company full possession of the roadway. This street is now within the City, a sewer has been constructed, and the side ditches filled in. During the spring and fall the road is almost impassable. A contract has been awarded for block paving the street, and the Street Railway Company notified to construct a double line of rails. Some action should be taken to arrange with the Gravel Road Company for the removal of its tracks, thus providing for the complete paving of the street,

and giving the property owners on the south side of the road the full benefit of the block pavement.

PERMANENT PAVEMENTS.

32,110 lineal feet of cedar block pavement, 1,050 feet of cedar and gravel' and 2,020 feet of cobble, making $6\frac{6}{100}$ miles have been constructed, and contracts entered into for $1\frac{8}{100}$ miles in addition to the above.

The completion of the College Avenue pavement, from McCaul Street to Yonge Street, and laying a double line of rails by the Street Car Company, connects the north-west portion of the City with its business centre; the paving of Carlton Street, from Yonge to Parliament Street, and the laying of street railway tracks will give the eastern and western limits of the City a thorough service. A portion of the pavement is already constructed, and the whole street will be completed early in the summer.

ABSTRACT OF APPENDIX TO REPORT.

- A—Abstract of stone delivered.
- B—Abstract of sidewalks constructed.
- C—Abstract of sewers constructed.
- D—Abstract giving number of sewers constructed in the City up to the 31st of December, 1885, with their cost and mileage.
- E—Abstract of cedar block roadways constructed during the year.
- F—Detailed statement showing the total mileage and cost of cedar block pavements constructed up to 31st December, 1885.
- G—Abstract of cedar block roadways under contract.
- H—Abstract of expenditure by Ward Foremen.
- I—Abstract of new streets opened during the year.
- J—Table—Tests of cement used in the City works.
- K—Mileage of street railway tracks.

APPENDIX A.

Abstract of Stone delivered for Roadways, 1885.

Corporation, 45.16 toise unbroken.....		
A. W. Godson, 501.37 toise, \$10.40	\$5,214	25
W. Goldring, 500.92 " 10.00.....	5,009	20
J. Aikins, 6.26 " 12.00.....	75	12
	<u>\$10,298</u>	<u>57</u>

APPENDIX B.

List of Sidewalks constructed during the year 1885 ; also length in feet and quantity of Lumber used.

ST. STEPHEN'S WARD.

Street.	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
College	Off Bathurst .....	.....	north	12	140	4,480
Queen	Off Dundas .....	.....	west.	"	160	4,905
Dundas .....	.....	.....	"	"	26	797
Queen	Near Dovercourt Road .....	.....	north	"	80	2,452
Dovercourt Rd...	Dundas	Church	west.	8	200	4,266
Dovercourt Rd...	Cor. Argyle .....	.....	"	"	70	1,492
Bathurst	Near Arthur .....	.....	"	"	30	639
Bathurst	North of College .....	.....	"	6	120	1,920
Harrison	Extending old walk .....	.....	north	"	51	850
Shaw .....	.....	.....	both.	"	2,070	33,120
College	West of Bathurst .....	.....	south	"	368	5,888
Muter	North of Arthur .....	.....	north	"	550	6,800
Markham	Queen	Robinson	"	"	550	6,800
Lippincott	Bloor	Southward	"	"	1,156	18,469
Markham	Queen	Robinson	east.	"	550	6,800
Markham .....	.....	.....	.....	4	102	1,087
Henderson Av...	.....	.....	.....	"	160	1,705
Gladstone Av...	.....	.....	.....	"	252	2,686
Rolyat	Grange Ave.	Old walk	south	"	295	3,144
Henderson Av...	.....	.....	"	"	302	3,219
Gladstone Av...	North from Dundas .....	.....	east.	"	552	5,884
Argyle	Northcote Av....	Gladstone Av....	south	"	200	2,132
Henderson Av...	Whole length .....	.....	north	"	300	3,198
Clinton	At new houses .....	.....	east.	"	100	1,066
Ossington Av...	.....	.....	.....	2	740	3,944
Dewson .....	.....	.....	.....	"	740	3,944
Clinton	At new houses .....	.....	east.	"	300	1,599
Gladstone Av...	.....	.....	.....	"	50	300
Hope	North of College .....	.....	"	"	630	3,780
Short pieces of	walk and patching .....	.....	.....	.....	.....	76,210
					10,844	213,576

ST. PATRICK'S WARD.

Street.	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
Cecil	Beverley	Westward	south	6	201	2,216
Sussex Ave.	Spadina Av.	Robert	north	"	360	5,760
Robert	Foxley	Harbord	east	"	500	8,000
St. Patrick	Spadina Av.	Esther	south	"	874	15,984
Anderson			"	"	413	6,608
Sullivan	Brock	Huron	north	"	453	7,248
Spadina Av.	Cor. of Sussex Av.		"	"	216	3,456
Baldwin	Beverley	Huron	"	"	598	9,568
Huron	Near Harbord ..		east	"	88	1,408
Esther	Queen	St. Patrick	both	"	1,767	28,272
Henry	Baldwin	Cecil	west	"	412	6,592
Henry	Baldwin	Cecil	east	"	459	7,344
Huron	Harbord	Sussex Av.	"	"	537	8,592
Robert	Russell	Harbord	west	"	1,310	20,960
Lippincott	Nassau	Bloor	both	"	6,175	98,800
Harbord	Bathurst	Lippincott	south	4	300	3,198
Harbord	Major	Spadina Av.	"	"	696	7,419
Wilcox	Spadina Av.	Eastward	"	"	170	1,812
Sussex Av.	Spadina Av.	Robert	north	"	206	2,196
Clyde	At west end		both	"	235	2,505
Larch	Whole length		"	"	722	7,697
Anderson	McCaul	Avenue	"	"	921	9,818
Washington Av. .	Huron	Spadina Av.	north	2	450	2,700
Short pieces of walk and patching						46,605
					18,063	314,758

ST. JOHN'S WARD.

Street.	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
Albert	Yonge	A lane	north	12	130	3,985
Terauley	Elm	Edward	east	8	250	5,330
Agnes	Centre	Chestnut	north	"	275	5,863
Edward	University	Chestnut	south	6	450	7,200
Edward	Terauley	Yonge	north	"	845	13,520
Elizabeth	Queen	Albert	both	"	922	14,752
Alice	Yonge	Terauley	north	"	758	12,128
Surrey Place	Whole length		east	"	860	13,760
St. Albans			south	"	85	1,360
Breadalbane			"	"	165	2,640
James	Whole length		west	"	757	12,112
Terauley	Albert	Gerrard	"	"	1,900	30,400
Yonge	Two pieces		"	"	481	10,254
St. Joseph	Near Park		north	4	337	3,592
Short pieces of walk and patching						42,311
					8,215	179,207

ST. ANDREW'S WARD.

Street.	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
Queen	Esther.....	Brock	south	12	827	25,347
Queen	Simcoe	Duncan.....	"	"	552	16,918
Queen	Opposite Lumley		"	14	266	9,929
Adelaide	Simcoe	York	"	8	640	13,644
John	King	Adelaide	west.	6	468	7,488
Simcoe	King	Adelaide	east.	"	333	5,328
Richmond Pl.....	South end		"	"	42	672
King	Simcoe	John	north	"	998	15,968
King	Stafford	Strachan Av.....	"	"	510	8,160
Richmond	Duncan	John	"	"	415	6,640
King	Niagara	Bridge	"	"	339	5,424
Niagara	Queen	King	both.	"	2,180	34,880
King	John	Widmer	north	"	241	3,856
Peter.....	Queen	Charlotte	west.	"	444	7,104
Peter.....	Adelaide	Southward	east.	"	167	2,672
Richmond Pl.....			both.	4	210	2,238
Lucas			south	"	622	6,630
Bell	Whole length		north	"	544	5,799
Duncan.....	Queen	Richmond	west.	"	228	2,430
Drummond Pl....	Whole length		east.	"	215	2,292
Adelaide	McDonald Sq.....	Niagara	south	"	977	10,414
Short pieces of walk and patching						78,431
					11,218	272,264

ST. GEORGE'S WARD.

Street	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
Front	Yonge.....	Bay.....	south	12	498	15,263
Bay.....	Melinda.	Wellington.....	east.	"	234	7,520
Bay.....	Front.....	Wellington	"	10	98	3,136
Jordan.....			west..	7	50	830
Bathurst.....	King.....	Stewart.....	east.	6	215	3,440
Stewart.....	Whole length.....		south	"	740	11,840
Stewart.....			north	"	67	1,070
Wellington Pl....	Brock.....	Portland.....	"	"	1,329	21,264
Wellington	Peter.....	Clarence Sq.....	south	"	308	4,928
Clarence Sq....	To south end.....		east.	"	228	3,648
Niagara.....	Bathurst.....	Westward.....	south	"	500	8,000
Stafford.....	King.....	Wellington.....	both.	4	1,054	11,235
Short pieces of walk and patching						37,236
					5,321	129,460

RE-LAYING AND RENEWING STONE FLAGGING.

Yonge Street, from King Street to Front Street, west side, 800 feet.

ST. PAUL'S WARD.

Street	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
Yonge.....	Bloor.....	Davenport Rd....	both..	12	1,934	59,277
Yonge.....	Davenport Rd....	Hill.....	west..	8	1,647	35,114
Yonge.....	By Mr. Buggs.....	.....	east..	"	582	12,408
Yonge.....	At Hollow.....	.....	west..	"	260	5,543
Bridge.....	Each side of brid	ge.....	"	6	510	8,160
Bishop.....	.....	.....	north	4	260	2,771
					5,193	123,273

ST. MARK'S WARD.

Street	From	To	Side of Street.	Width.	Length.	B.M.
					ft.	ft.
Sheridan Av.....	.....	.....	.....	ft.	286	3,048
Sheridan Av.....	.....	.....	.....	4	305	3,188
Gordon.....	.....	.....	north	"	332	3,539
St. Clarens Av....	.....	.....	both..	"	970	10,340
Jamieson Av.....	.....	.....	east..	"	606	6,459
Sheridan Av.....	.....	.....	"	"	344	3,667
Florence.....	Brockton Rd.....	Old walk.....	south	"	360	3,837
McDonald Av....	Whole length.....	.....	east..	"	140	1,492
Norfolk.....	Whole length.....	.....	"	"	300	3,198
Sheridan Av.....	.....	.....	north	"	148	1,577
Frankish Av.....	.....	.....	"	"	440	4,690
Bloor.....	Railway track... Dundas.....	.....	south	"	1,980	21,106
Sauraren Av.....	.....	.....	east..	"	572	6,097
Roncesville Av...	Howard.....	High Park Av....	west..	2	768	4,608
High Park Av....	.....	.....	.....	"	1,084	6,504
					8,635	83,350

ST. JAMES' WARD.

Street.	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
Church	King	Adelaide	east .	12	390	11,960
Church	Richmond	Shuter.....	west. "	"	790	24,267
Wilton Av.....	Bond	Yonge.....	north	10	114	3,040
Wilton Av.....	Bond	Yonge.....	"	8	455	9,707
Church	Gould	Wilton Av.....	west. "	"	613	13,077
Wood	Church	Yonge.....	south	6	966	15,360
Mutual	Shuter	Yonge	east. "	"	599	9,584
Maitland	Church	Yonge.....	south	"	806	12,896
Wellesley.....	Yonge	Church	"	"	950	15,200
Maitland	Yonge	Church	north	"	804	12,864
Isabella	Church	Westward	south	"	289	4,624
Jarvis	Queen	Richmond	west. "	"	210	3,160
Carlton	Yonge	Church	both. "	"	1,780	29,536
Victoria	Wilton Ave.....	Queen	east .	"	1,237	19,782
Gerrard	Jarvis	Mutual	north	"	470	10,027
McGill.....	Mutual	Church	south	"	399	6,384
Ann	Church	Westward	north	"	365	9,040
Wilton Ave.....	Jarvis	Mutual	"	"	285	4,560
Hayden	Church	Yonge.....	both. "	4	2,048	21,845
Short pieces of walk and patching .....				.....	.....	83,808
					13,570	320,721

ST THOMAS WARD.

Street	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
Jarvis.....	King	Duke	east .	12	276	8,464
George.....	King	Duke	west. "	"	263	7,775
Carlton	Jarvis.....	Sherbourne	north	8	716	15,275
Sherbourne.....	Gerrard.....	Carlton	east .	6	622	9,952
Wellesley Cres.....	Jarvis	Sherbourne	north	"	983	15,728
Wellesley Cres.....	Jarvis	Easterly.....	south	"	639	10,224
Sherbourne.....	Wellesley.....	Northward	west. "	"	109	1,744
Isabella	Jarvis	Huntley.....	north	"	289	4,624
George.....	Duchess.....	Duke	west. "	"	388	8,288
Seaton	Queen	Wilton Av.....	west. "	"	1,446	23,136
Wilton Cres	George	Pembroke	south	"	365	5,840
Carlton	Bleeker	Westward	north	"	108	1,728
Pembroke.....	Wilton Av.....	Gerrard.....	east .	"	928	14,848
Pembroke.....	Wilton Av.....	Gerrard.....	west. "	"	977	15,632
George	Wilton Cres.....	Southerly	east .	"	140	2,240
Wilton Av.....	Sherbourne	Seaton	north	"	340	5,440
Jarvis	King	Duke	east .	12	420	12,320
Pembroke.....	Homewood Av.....	Eastward	both. "	4	272	2,901
Short pieces of walk and patching .....				.....	.....	61,238
					9,281	227,397

ST. DAVID'S WARD.

Street.	From	To	Side of Street.	Width.	Length.	B.M.
				ft.	ft.	ft.
Orford Av.	Parliament	Eastward	north	6	284	4,544
Ontario	Winchester	Carlton	east	"	453	7,248
Winchester	Ontario	Sumach	south	"	2,033	32,528
Winchester	Parliament	Ontario	north	"	736	11,776
Carlton	Sackville	Sumach	"	"	622	9,952
Gifford	Carlton	Spruce	both	"	835	13,360
Gerrard	Berkeley	Parliament	south	"	271	4,336
Spruce	Sackville	Gifford	north	"	206	3,296
Sackville	Wellesley	Winchester	west	"	778	12,448
Sackville	Spruce	Winchester	east	"	918	14,688
Sumach	Carlton	Winchester	west	"	508	8,128
Sackville	Wilton Av	Oak	east	"	390	6,240
Wilton Av	Parliament	River	north	"	1,808	28,928
Spruce	Parliament	Sackville	both	"	1,635	26,160
Carlton	Medcalf	Sackville	north	"	455	7,280
Amelia	Sackville	Medcalf	south	"	447	7,152
Medcalf	Carlton	Northward	west	"	141	804
Carlton	Medcalf	Parliament	north	5	330	1,180
Medcalf	Carlton	Northward	east	"	140	373
Sackville	Amelia	Southward	west	4	50	533
Medcalf	Amelia	Southward	east	"	68	421
Radenhurst	River	Defries	north	"	262	2,795
Bell	River	River Don	south	"	540	5,760
Bell	River	River Don	north	"	441	4,704
Carlton	Sumach	Eastward	south	"	276	2,944
Short pieces of	walk and patch	ing .....	.....	.....	.....	81,486
					14,627	299,064

ST. LAWRENCE WARD.

Street	From	To	Side of Street.	Width.	Length.	B.M.
					ft.	ft.
Jarvis	King	Front	west.	12	164	5,029
West Market	King	Front	east.	"	165	5,060
King	Jarvis	West Market	south	16	161	6,440
Jarvis	Esplanade	A Lane	east.	12	271	8,311
Yonge	Esplanade	A Lane	east.	"	70	2,147
Yonge	Front	A Lane	east.	"	180	5,760
Trinity	Mill	Front	west.	6	580	3,120
Kingston Road	Lewis	Saulter	south	"	500	7,032
Esplanade	Frederick	Scott	north	"	2,014	32,224
Parliament	Mill	East	"	"	347	5,552
Front	Ontario	South	south	"	386	6,176
Front	Parliament	Trinity	north	"	691	11,056
Front	Princess	Sherbourne	north	"	330	5,280
Front	Trinity	Parliament	south	"	556	8,896
Lewis	Kingston Road	Southerly	east.	4	251	2,677
Strange	Kingston Road	Eastern Av.	west.	"	158	1,685
Derby	Trinity	Erin	both.	"	254	2,709
Parliament	Mill	Esplanade	west.	"	130	1,387
Williamson Av	Funston	Eastward	east.	"	243	2,592
Willow	Eastern Av.	Kingston Road ..	south	"	276	2,944
Short pieces of walk and patch	ing	ing .....	.....	.....	.....	51,307
					7,727	177,384

RE-LAYING AND RENEWING STONE FLAGGING.

Yonge Street, from King Street to Front Street, length 800 feet.

ST. MATTHEW'S WARD.

Street.	From	To	Side of Street.	Width.	Length. in feet.	B.M.
					ft.	ft.
Kingston Rd.	Pape Av.	Westward	north	6	147	2,352
Elliott Av.	Broadview Av. ..	Boulton Av.	south	"	823	13,168
Elliott Av.	Broadview Av.	Boulton Av.	north	"	820	13,120
Gerrard	Broadview Av.	Eastward	"	4	1,434	15,296
Smith	Broadview Av.	Eastward	"	"	1,105	11,787
Foster	Kingston Rd.	Northward	east.	"	454	4,843
Leslie	Kingston Rd.	North	"	"	157	1,675
Allen Av.	Broadview Av.	Eastward	north	"	669	7,136
Monroe	A lane	Southward	west.	"	170	1,813
Thomson	High	Westward	both.	"	470	5,013
High	Thompson	Southward	east.	2	70	373
Short pieces of walk and patch	ing	ing .....	.....	.....	.....	17,387
Total .....	.....	.....	.....	.....	6,319	93,963

A SUMMARY,

Shewing the Total Lengths and B.M. in Sidewalks in the various Wards.

WARD.	Length in feet.	B.M.
St. Stephen	10,844	213,576
St. Patrick.....	18,063	314,758
St. John.....	8,215	179,207
St. Andrew	11,218	272,264
St. George.....	5,321	129,460
St. Paul	5,193	123,273
St. Mark.....	8,635	83,350
St. James.....	13,570	320,721
St. Thomas	9,281	227,397
St. David.....	14,627	299,064
St. Lawrence.....	7,727	177,384
St. Matthew	6,319	93,963
	119,013	2,434,417

Making a total of 22½ miles of new sidewalks laid during the year 1885.

Number of Crossings constructed during the year 1885, with Board Measure.

WARD.	Number.	B.M.
St. Stephen.....	10	8,511
St. Patrick.....	11	6,478
St. John.....	13	11,813
St. Andrew.....	12	9,790
St. George.....	15	14,149
St. Paul.....	7	6,500
St. Mark.....	5	4,646
St. James.....	15	12,351
St. Thomas.....	16	12,609
St. David.....	7	6,157
St. Lawrence.....	16	10,527
St. Matthew.....	5	3,450
	132	106,981

APPENDIX C.

Total List of Sewers of all dimensions constructed during the year ending December, 1885.

No.	Street.	From	To	Size.	Length. in yards.	Cost.
1	Garrison Creek	Queen	College	5' 6" x 6' 6"	1,589	\$ 43,000 00
2	Kingston Rd...	Mill	Eastern Av...	2' 4" x 3' 6"	2,133	21,141 91
3	Adelaide	Yonge	Bay	3ft. x 2ft.	204	2,165 00
4	Waterloo Av...	Dufferin and	Florence Sts...	"	543	9,000 00
Total length		in yds. all sizes	brick		4,469	75,306 91
5	Bolton	Kingston Rd...	1982 ft. north...	18in.	661	3,108 00
6	Bolton	Smith to 1982ft.	N. Kingston Rd	"	154	577 00
7	Bridge	The bridge	Rosedale C'k...	"	113	701 05
8	Crawford	Arthur	College	"	500	2,598 00
9	DeGrassi	Kingston Rd...	North term...	"	700	3,074 50
10	Dundas	Jamieson Av...	Dufferin	"	730	3,966 00
11	Markham	Queen	Robinson	"	200	956 00
12	Morse	Kingston Rd...	The Bay	"	700	2,535 00
13	Sumach	Amelia	Wellesley	"	117	569 00
14	Spruce	Sumach	600 ft. east...	"	200	893 00
15	South Drive...	Present term...	S. limit lot 42	"	90	372 00
16	Wellesley	Sumach	450 ft. west ...	"	150	740 00
17	York	Front	The Bay	"	140	914 45
Total length		18in			4,455	21,004 00
18	Allen Av	Broadview Av.	A lane	15in.	233	955 00
19	Classic Place...	Huron	Spadina Av...	"	180	821 00
20	Cumming	DeGrassi	Bolton	"	73	380 00
21	Elliott Av	Broadview Av.	Monroe	"	150	587 00
22	Grange Rd	McCaul	200 ft. west ...	"	70	337 50
23	Kerr's Lane...	Spadina Av...	West terms...	"	180	880 00
24	Lane bet. Queen & Richmond	Niagara	Richmond	"	350	1,288 65
25	L. bet. Yonge and Victoria.	Wilton Av	Gould	"	257	928 00
26	Lane bet. Fox- ley and Argyle.	rear of Dover- court Rd	Argyle	"	270	1,124 00
27	Langley Av	Broadview Av.	980 feet east...	"	327	1,199 00
28	Mutual	Gerrard	Carlton	"	237	1,155 80
29	Medcalfe	Carlton to 60ft.	S of Winchester	"	143	587 00
30	North Drive...	Woodland Av.	Line bet. lots 17 and 18	"	137	335 00
31	Princess	Duke	King	"	100	539 00
32	Ulster	Lippincott	Borden	"	110	480 00
33	Willcox	Huron	Robert	"	310	1,466 50
34	Washington Av	Spadina Av...	Huron	"	175	711 90
35	Wellesley Cres.	Homewood Av.	150 feet east...	"	50	304 00
36	Woodland Av.	Bridge	North Drive...	"	300	1,210 90
Total length					3,652	15,290 25

APPENDIX C.—Continued.

No.	Street.	From	To	Size.	Length.	Cost.
37	Dermitt Lane..	Spruce	Carlton	12in	110	\$ ^{c.} 323 00
38	Lane of Clinton	Clinton	West Terminus	"	107	410 50
39	Lane bet. Jarvis and Mutual.....	Shuter.....	Jarvis	"	200	727 50
40	Lane bet. Jarvis and George	Shuter.....	Jarvis	"	203	752 00
41	Lane west of Yonge	Yonge St. Av...	Grenville	"	80	314 00
42	Lane south of King.....	Niagara	Walnut Av.....	"	163	427 50
43	Lane bet. King and Mercer.....	Peter.....	John.....	"	240	799 00
44	Lane in rear of Bathurst.....	Niagara.	Douro.....	"	97	285 00
45	Lane in rear of Caer Howell. William.		East terminus.	"	50	151 75
					1,250	4,190 25

Sewers.

The following sewers are now under construction :

Bathurst Street, south side of railway tracks to Queen's Wharf	ft. 400
Brock Road, Florence Street to College Street.....	2,400
Garrison Creek, Wellington Avenue to the Lake	1,680
Garrison Creek, Queen Street to College Street.....	4,767

Length in feet 9,247

Works recommended for which contracts have been let and not yet commenced :

Sewers.

Rusholme Road, Hepbourne Street to College Street.....	ft. 2,000
College Street, Concord Avenue to Rusholme Road.....	1,100
Carroll Street, Queen Street to Thompson Street.....	300
Monroe Street, Thompson Street to Geirard Street.....	2,000
Church Street, Charles Street to Bloor Street.....	500
Parliament Street, St. James Avenue to Wellesley Street.....	550
Bay Street, King Street to the Bay.....	1,500
Lane between Northcote Avenue and Gladstone Avenue, Gladstone Avenue to northern terminus	400
Parliament Street, St. James Avenue to Howard Street.....	550
Dufferin Street, Bank Street to 450 feet north.....	450
Victor Avenue, Broadview Avenue to 720 feet east.....	720
College Street, Garrison Creek to Concord Avenue.....	1,200
College Street, Garrison Creek to Bathurst Street.....	3,400

Length in feet..... 14,670

APPENDIX D.

Total List of Sewers in Toronto to date.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c.
Adelaide.....	Jarvis	Victoria	1,250	3ft. x 2ft.	Brick.	4,200 00
Adelaide	Victoria	Yonge	350	"	"	1,170 00
Anderson	McCaul	Simcoe	300	"	"	900 00
Avenue Rd.	University C.	Boswell Av...	1,700	"	"	5,850 00
Albert	Elizabeth	Yonge.....	1,110	2ft. 9in. x 1 ft. 9in.	"	2,960 00
Agnes	Yonge.....	Terauley	693	2ft. 6in. x 1 ft. 3in.	"	1,620 00
Agnes	Elizabeth	Terauley	297	"	"	650 00
Adelaide	Yonge.....	Bay	630	"	"	2,112 00
Adelaide	Bay	York	792	2ft. x 1ft. 3in.	"	1,840 00
Adelaide	York	Simcoe	940	"	"	2,200 00
Adelaide	Peter.....	Brock	850	2ft. x 3ft.	"	1,980 00
Adelaide	Brock	Brant	600	18in.	Tile.	1,100 00
Adelaide	Brant	Portland.....	732	"	"	983 00
Adelaide	Portland.....	Bathurst.....	700	"	"	900 00
Arthur	Muter	Bathurst.....	624	"	"	572 00
Arthur	Muter	Lumley.....	390	"	"	568 00
Alexander	Church	Mutual	390	"	"	715 35
Alma Av....	Gladstone Av	Dufferin	399	"	"	698 30
Adelaide	John	Peter.....	660	"	"	1,573 00
Amelia	Pa liament .	Sumach	1,581	"	"	4,020 00
Ann.....	Yonge.....	500 ft. east..	591	"	"	} 2,003 50
Ann.....	Church	N. Mutual ...	390	"	"	
Arthur	Garrison C'k.	Lumley.....	1,821	"	"	3,998 00
Alice	Yonge.....	Terauley.....	725	15in.	"	1,200 00
Adelaide	Tecumseth....	Creek	1,005	"	"	1,600 00
Avenue Rd.	Victoria Av.	Wells Creek..	1,200	"	"	2,000 00
Argyle.....	Dundas	Shaw	700	"	"	1,300 00
Avenue Rd.	University C.	Victoria Av.	1,750	12in.	"	2,100 00
Alen Av....	Broadview A	A lane.....	699	15in.	"	935 00
Adelaide	Stafford	Strachan Av.	300	12in.	"	336 00
Ann.....	Church	Westerly	700	2ft.	Brick.	1,160 00
Alexander ...	Yonge	Church	1,000	"	"	1,500 00
Brock	King	To the Bay...	1,100	5ft. 6in. x 4ft. 0in.	"	17,500 00
Brock	Baldwin	King.....	3,150	5ft. 0in. x 3ft. 6in.	"	20,500 00
Bathurst.....	Queen	King.....	1,169	3ft. 9in. x 2ft. 6in.	"	4,700 00
Bathurst.....	King.....	To the Bay...	1,443	"	"	5,700 00
Brock	College	Crescent.....	327	"	"	1,004 50
Brock	College	Baldwin	1,000	"	"	4,100 00
Beverley	Queen.....	College	3,412	"	"	13,800 00
Bathurst.....	College	Queen	3,600	3ft. 6in. x 2ft. 9in.	"	10,565 00
Brock	Crescent.....	Bloor	3,453	3ft. x 2ft.	"	8,105 00
Baldwin.....	Brock	Beverley.....	1,005	"	"	2,363 00
Bloor	Huntley	Sherbourne .	639	"	"	1,651 30
Berkeley	King	Duchess.....	750	"	"	2,000 00
Berkeley	Beech	ndenham ...	1,110	"	"	2,900 00
Berkeley	Esplanade....	King	1,002	"	"	4,697 00
Bellevue Av.	Bellevue Pl.	College.....	1,479	"	"	3,815 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c.
Borden.....	College	Bloor	3,198	3ft. x 2ft.	Brick.	6,891 00
Bathurst.....	College	Bloor	3,270	"	"	9,561 00
Bridge.....	Creek	South line ..	999	"	"	9,000 00
Berkeley.....	Sydenham ..	Queen	528	3 ft. x 1ft. 9in.	"	1,140 00
Bay	Front	King	1,000	2ft. 9in. x 1ft. 6in.	"	2,100 00
Bay	King	Queen	1,200	"	"	2,800 00
Breadalbane	Yonge.....	Surrey Place	1,339	3ft. x 2ft.	"	4,400 00
Boulton	Simcoe.....	York	600	2ft. 6in. x 1ft. 3in.	"	
Brunswick A.	College	Bloor	3,300	24in.	"	6,600 00
Bloor	Yonge.....	Huntley.....	2,000	"	"	4,200 00
Bloor	North	Queen's P'k.	680	"	"	1,620 00
Bloor	Yonge.....	North	657	"	"	1,572 50
Bond	Queen	Gould.....	1,800	1ft. 9in.	"	3,000 00
Beaconsf'd A.	Queen	Saurin.....	1,503	18in.	Tile.	2,050 00
Boulton	East of York	.....	550	"	Brick.	900 00
Bishop.....	Queen	Northerly....	325	"	Tile.	509 00
Berkeley.....	Queen	Duchess.....	285	"	"	1,412 00
Berkeley.....	Wilton Av ..	Gerrard	1,110	"	"	1,735 00
Broadview A.	Gerrard East	Langley Av....	900	"	"	1,210 00
Berkeley	Gerrard	Carlton	696	"	"	1,097 00
Bleeker.	300 ft. N. of	.....			
	Wellesley....	Howard	1,095	"	"	1,770 00
Bellevue Pl.	Bellevue Av.	Leonard Av.	369	"	"	621 20
Brant	Adelaide	King	468	"	"	800 00
Balsam	Charlotte	Brock	351	"	"	668 75
Buchanan....	Yonge.....	Terauley.....	750	"	"	2,611 00
Buller	Brunswick A.	Major	303	"	"	461 90
Bulwer	Soho	Westerly	730	"	"	1,400 00
Beaconsf'd A	Saurin	Dundas	981	"	"	2,030 65
Bloor.....	Avenue Rd.	670 feet east.	670	"	"	1,056 00
Belmont	Davenport R	McMurrich ..	675	"	"	1,050 00
Belmont	Yonge.....	McMurrich ..	450	"	"	816 00
Broadview A.	Langley Av.	S. side King- ston Rd.....	3,321	"	"	3,859 00
Bolton.....	Kingston Rd.	1982 ft. North	1,982	"	"	3,095 00
Bolton.....	Present term	Gerrard	462	"	"	577 00
Bridge.....	The bridge...	Creek	339	"	"	678 00
Bank	Dufferin.....	Sheridan.....	500	15in.	"	850 00
Baldwin	B verley.....	McCaul.....	650	"	"	1,000 00
Britain	Sherbourne ..	George	710	"	"	1,200 00
Bleeker.....	Carlton	300 feet N. of				
	Wellesley ...	.....	1,813	"	"	3,000 00
Berkeley	Winches er.	Prospect	456	"	"	640 50
Birch Av.....	Yonge	West end....	1,329	"	"	2,200 00
Bell	River.....	East term....	459	"	"	720 00
Bismark Av.	Yonge	Gwynne	711	"	"	992 00
Boswell Av...	Avenue Rd.	Westerly	628	12in.	"	800 00
Boswell Av...	West end....	Avenue Rd.	630	"	"	800 00
Berryman.....	Davenport R	West end....	544	"	"	592 00
Bishop	Davenport R	West end....	544	"	"	592 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c.
Brown's Lane	Bathurst.....	East end.....	250	12in.	Tile.	464 00
Bellairs	Yorkville Av	Cumberland.	321	"	"	422 00
Bishop	Davenport R	West end	430	9in.	"	360 00
Balmuto	Czar.....	St. Nicholas.	700	15in. and 12in.	"	2,109 00
Cherry	The Bay	Eastern Av...	1,665	4ft. x 2ft. 8in.	Brick.	4,000 00
Church	King	Queen.....	1,230	"	"	19,523 00
Church	The Bay	King	1,032	"	"	6,700 00
Church	Queen	Wilton Av...	1,281	3ft. 6in. x 2ft. 4in.	"	4,200 00
Church	Wilton Av...	Gerrard	1,299	3ft. 3in. x 2ft. 2in.	"	4,000 00
Church	Gerrard	Carlton	866	3ft. x 2ft.	"	2,800 00
Colborne	Yonge.....	Church	969	"	"	2,367 90
Carlton	Church	Jarvis	675	"	"	1,782 50
Carlton	Seaton	Parliament...	963	"	"	3,200 00
Caer Howell.	Simcoe	McCaul	600	"	"	2,000 00
College	Spadina Av.	Beverley.....	945	"	"	2,392 50
College	Brunswick A	Bathurst.....	999	"	"	3,300 00
College	Spadina Av.	Brunswick A	978	"	"	2,612 50
Cambridge...	Brock	Grosvenor A.	819	"	"	2,200 00
Charles	Brock	Beverley.....	1,052	"	"	3,000 00
Claremont...	Queen.....	Herbert	500	"	"	1,500 00
Conway and Clinton	Bellwoods A	Bloor	3,852	"	"	12,782 00
Church	Carlton	Wellesley....	1,500	3ft. x 1ft. 9in.	"	4,200 00
Carlton	Jarvis	Sherbourne .	930	3ft. x 2ft.	"	1,864 50
Chestnut	Queen	Osgoode L...	550	2ft. 6in. x 1ft. 3in.	"	1,450 00
Chestnut	Osgoode	Elm	1,593	"	"	3,500 00
Centre	Osgoode	Elm	2,427	"	"	4,900 00
Church	Wellesley....	Charles	1,200	2ft. 4in. x 1 ft. 10in	"	3,400 00
Charles	Yonge.....	Church	1,725	24in.	"	2,800 00
Chestnut	Elm	Avenue L....	1,060	18in.	"	1,600 00
Crawford	Arthur	College	1,500	"	Tile.	2,598 00
Cornwall.....	River	East term....	660	"	"	993 50
Court	Church	Toronto	399	"	"	835 00
Colborne.....	Church	West Market	399	"	"	1,459 75
Carlton	Yonge.....	Near Church.	950	"	"	950 00
Carlton	Bleeker	Seaton	237	"	"	386 00
Carlton	Medcalfe ..	Sackville	516	"	"	822 00
College	Yonge	Creek	2,700	"	"	3,813 75
Centre.....	Elm	Avenue L....	900	"	"	1,500 00
Cecil	Huron.....	Spadina Av.	564	"	"	1,032 50
Cecil	Beverley....	Huron.....	630	"	"	1,210 50
Cameron.....	Queen	Vancouver ..	1,035	"	"	1,875 00
Cedar	Dundas	Dovercourt R	918	"	"	1,588 50
Cedar	Dovercourt R	Northcote A.	921	"	"	1,975 00
Carlton	Parliament .	Medcalfe	300	"	"	740 00
Carlyle	t. Patrick...	Bellevue Pl.	429	"	"	792 85
Charles	Church	Jarvis	705	"	"	1,113 00
Claremont...	H rbert	Conway	2,310	"	"	5,833 00
Carlton	Sackville	Sumach	750	"	"	1,509 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c
Clyde	Spadina Av.	West term...	690	18in.	File.	1,525 00
Crawford	Queen	Ravine	1,590	"	"	2,860 00
Camden	Brock	Brant	600	"	"	1,220 00
Cumberland.	Yonge.....	60 ft. east of Bellairs	969	"	"	1,610 00
Cumberland.	Avenue Rd...	Easterly	1,083	"	"	1,540 09
Czar.....	North	Queen's Park	540	15in.	"	1,375 00
Cottingham .	Yonge.....	Westerly	1,330	"	"	2,100 00
Classic Pl....	Huron	East term	249	"	"	396 00
Crawford	Broadview A.	Bolton.....	870	"	"	1,192 00
Classic Pl....	Huron.....	Spadina Av.	540	"	"	821 00
Cummings ...	DeGrassi.....	Bolton.....	219	"	"	378 00
Clara	Oak	205 ft. south.	205	12in.	"	349 00
Carlton Av...	Ontario	Easterly	249	"	"	400 00
Coolmine Av.	Dundas	St. Anne's ...	729	"	"	1,156 00
Christopher .	University...	Centre	231	"	"	448 00
Carlaw Av...	Kingston Rd.	Creek	1,371	6in.	"	729 40
Catherine.....	Peter.....	West end....	282	12in.	"	412 00
D'Arcy	Beverley.....	McCaul	650	3ft. x 2ft.	Brick.	4,338 00
D'Arcy	Brock	Beverley.....	1,080	"	"	2,604 00
Dundas	Queen	The bend	1,920	"	"	4,370 50
Dovercourt R	Dundas	Queen	2,226	"	"	5,312 00
Denison Av.	Queen	Bellevue Pl.	1,980	"	"	5,940 00
Duchess.....	Parliament...	Sherbourne .	1,083	2ft. 6in. x 1ft. 3in.	"	2,880 00
Duchess.....	Sherbourne .	Jarvis	909	"	"	2,000 00
Duke	Sherbourne..	Frederick	300	2ft. x 1ft. 3in.	"	550 00
Duke	Frederick....	Jarvis	650	"	"	1,300 00
Dalhousie....	Queen	Shuter	618	24in.	"	1,000 00
Duke	Berkeley....	Sherbourne .	1,030	"	"	"
Douro	Bathurst	Tecumseth..	750	18in.	"	1,500 00
Duke	Parliament..	The creek ...	500	"	Tile.	600 00
Division	Huron	Spadina Av .	429	"	"	836 25
Dorset.....	Wellington..	King	414	"	"	774 00
Dummer.....	Queen	180 yds north	540	"	"	900 00
Douro.....	Bathurst	East t'rminus	381	"	"	796 00
Douro	Tecumseth...	Niagara	320	"	"	1,358 00
Dalhousie....	Gould	Shuter.....	1,260	"	"	2,259 17
Dalhousie....	Gould.....	Gerrard	621	"	"	1,050 00
DeGrassi.....	Kingston Rd.	N. terminus.	2,100	"	"	3,059 00
Dundas	Jamieson Av.	Dufferin.....	2,190	"	"	3,661 00
Derby	Parliament...	Easterly	180	15in.	"	300 00
Duncan	Nelson to l'ne	S. of Nelson.	100	"	"	140 00
Draper	Wellington P	Front.....	501	"	"	756 00
Dovercourt R	Dundas	Northerly	851	"	"	1,411 80
Duchess.....	Sherbourne .	Easterly	219	"	"	520 90
Davenport R.	Yonge.....	Beverley	1,720	12in.	"	2,200 00
Downey's L.	Louisa ...	Alice	420	"	"	651 00
Davenport R.	New.....	Hazelton Av.	300	"	"	770 00
Davenport R.	Hazelton Av.	Belmont	621	"	"	800 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c.
Dufferin Pl.	Renfrew.....	Westerly	159	12in.	Tile.	143 00
Dermitt Lane	Spruce.....	Carlton.....	330	"	"	358 00
Dovercourt R	Foxley.....	Queen	750	12in. x 12in.	W Box	750 00
Eastern Av.	Trinity	Sumach	1,030	3ft. x 2ft.	Brick.	4,590 00
Eastern Av.	McGee	River Don....	2,130	"	"	4,994 00
Esther.....	Queen	St. Patrick...	1,422	"	"	4,078 00
Elm.....	Yonge.....	Terauley	744	"	"	2,100 00
Elizabeth	Queen.....	Agnes	1,452	2ft. 9in. x 1ft. 9in.	"	2,900 00
Elizabeth	Agnes.....	College Av....	1,760	"	"	3,400 00
Eastern Av.	Sumach	Water.....	540	18in.	Tile.	898 00
Elm	Terauley.....	Elizabeth	387	"	"	767 50
Elm	Centre.....	University....	250	"	"	420 00
Earl.....	Huntley	Sherbourne .	648	"	"	1,222 50
Eleanor	Bathurst.....	Easterly.....	366	"	"	705 00
Emma.....	Gerrard	College Av....	864	"	"	1,519 50
Edward.....	Yonge.....	Terauley.....	700	"	"	1,320 00
Elgin Av.....	Avenue Rd....	West end....	681	15in.	"	1,080 00
Elliott Av....	Broadview A.	Monroe.....	450	"	"	589 00
Esplanade ...	Frederick....	Sherbourne .	549	"	"	800 00
Edward	Terauley.....	Elizabeth	369	12in.	"	650 00
Eleanor	Escher.....	West end....	361	"	"	1,106 00
Florence.....	Dufferin	Brock Av....	1,035	2ft. x 3ft.	Brick.	3,700 00
Francis	King	Adelaide.....	455	3ft. x 2ft.	"	1,370 00
Front	Brock	Peter.....	800	3ft. x 1ft. 9in.	"	1,860 00
Front	Bay	Church.....	1,680	"	"	3,780 00
Front	Church	Jarvis	700	"	"	1,690 00
Front	Trinity	The Marsh....	1,005	2ft. 6in. x 1ft. 9in.	"	2,000 00
Front	Peter	John	700	2ft. 6in. x 1ft. 3in.	"	1,960 00
Front	Jarvis	George	330	24in.	"	600 00
Fenning	Queen.....	Maple	714	18in.	"	1,212 00
Foxley	Dundas	Dovercourt R	1,020	"	"	1,529 00
Frederick....	Front	Esplanade ...	545	15in.	"	1,085 00
Funston	Sumach	East term....	351	12in.	"	345 00
Front	Brock	Draper	1,011	15in.	"	1,615 00
Garrison C'k.	70 ft. south of					
	Wellingt'n A.	Queen	1,845	7ft. 6in.	"	20,485 00
Garrison C'k.	Queen	College	4,767	6ft. 6in. x 5ft. 6in.	"	44,900 00
Gerrard.....	Yonge	Elizabeth.....	1,175	3ft. x 2ft.	"	3,500 00
Grosvenor A.	St. Patrick...	College	1,881	"	"	5,500 00
George	Gerrard	Shuter	1,950	"	"	5,800 00
George	Shuter.....	Queen	598	"	"	1,800 00
George	Queen	Duke	900	"	"	2,700 00
Gladstone A.	Dundas	Queen	2,500	"	"	6,117 50
George	King	Duchess	500	2ft. x 1ft. 3in.	"	1,030 00
Gerrard.....	Parliament...	Sackville.....	750	18in.	Tile.	1,653 00
Gerrard.....	Sherbourne .	Seaton.....	210	"	"	700 00
Gould.....	Yonge	Lane	250	"	"	420 00
Gloucester...	Yonge	Church.....	1,000	"	Brick.	1,700 00
Grenville	Yonge	Surrey Place.	1,253	"	"	2,400 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c.
Garrison	Niagara	Tecumseth ..	800	18in.	Tile.	1,422 00
Givens	Queen	Argyle	1,026	"	"	1,773 00
Gifford	Spruce	Carlton	450	"	"	868 00
Grange Road	McCaul	200 ft. west..	210	15in.	"	337 50
Gerrard	Sackville	Sumach	720	"	"	1,200 00
Gladstone Av	Dundas	Northerly ...	591	"	"	758 00
Goulding	Muter	E. Terminus..	264	"	"	399 00
Gould	Church	Mutual	400	"	"	670 00
Gloucester ...	Church	Jarvis	1,080	"	"	1,800 00
Gordon	Dufferin	Sheridan	500	"	"	830 00
Gerrard East	Yonge	Jarvis	1,530	12in.	"	2,000 00
Grosvenor ...	Yonge	Surrey Place ..	1,253	"	"	1,700 00
Grove Av	Dundas	Foxley	729	"	"	1,175 00
Gerrard	Parliament...	Seaton	651	"	"	1,508 00
Hayter	Yonge	250 ft. east of Terauley...	744	3ft. x 2ft.	Brick.	2,200 00
Herbert	Claremont ...	Robinson . }	3,672	"	"	8,722 00
Hope	Robinson ...	College ... }		"	"	5,040 00
Huron	College	Harbord	1,899	"	"	1,208 00
Huron	Harbord	Hayden	600	"	"	3,647 00
Hope	College	Buller	1,281	"	"	2,089 00
Huron	Sussex Av ..	Bloor	801	"	"	5,200 00
Hope	Buller	Bloor	1,980	"	"	1,466 00
High	Esther	Spadina Av ..	792	18in.	Tile.	597 50
High	Denison Av ..	Hackney ...	369	"	"	752 50
Huron	Baldwin	Cecil	447	"	"	1,040 20
Huron	Cecil	College	582	"	"	851 00
Hayden	Huron	Spadina Av ..	480	"	"	1,419 50
Hackney ...	Woolsley ...	High	325	"	"	1,776 00
Hayden	Church	Yonge	990	"	"	707 20
Huntley	Earl	Isabella	330	"	"	1,110 00
Huntley	Isabella	Selby	660	"	"	2,283 00
Howard	Parliament...	Bleeker	1,290	"	"	767 00
Harrison	Ossington Av	Lakeview Av ..	420	"	"	760 00
Hayden	Terauley	Elizabeth ...	456	15in.	"	1,650 00
Huntley	Bloor	Isabella	1,005	"	"	2,100 00
Homewood A	Carlton	Wellesley C ..	1,360	"	"	34 50
Hagerman ...	Elizabeth ...	Easterly	225	"	"	1,004 00
Henry	Cecil	College	660	"	"	495 00
Huron	Baldwin	D'Arcy	189	"	"	2,634 00
Harbord	Spadina Av ..	Bathurst	1,920	"	"	940 00
Herrick	Borden	Major	591	"	"	547 00
Henderson A	Hope	Clinton	330	"	"	660 00
Huron	Grange Rd...	St. Patrick ...	390	"	"	2,100 00
Hazelton Av	William	Davenport R ..	1,600	12in.	"	1,090 00
Halton	Dundas	Shaw	369	"	"	370 00
Herbert	Bellwoods Av	Claremont ...	300	"	"	489 00
Henderson A	Clinton	West term...	321	"	"	
Halton	Givens	120 ft. east of Dundas	180	"	"	275 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
Isabella.....	Jarvis.....	Sherbourne .	981	3ft. x 2ft.	Brick.	\$ 2,806 25
Isabella.....	Yonge.....	Easterly	580	18in.	"	800 00
Isabella.....	Church.....	Jarvis.....	750	15in.	Tile.	1,200 00
Inkerman....	St. Charles ..	Chapel Lane.	639	12in.	"	1,078 00
Jarvis.....	Wilton Av ..	Creek	430	5ft. x 3ft. 6in.	Brick.	3,000 00
Jarvis.....	Creek	King.....	2,070	"	"	13,900 00
Jarvis.....	King.....	The Bay	950	"	"	7,800 00
Jarvis.....	Carlton.....	Wilton Av....	2,020	4ft. 6in. x 3ft.	"	10 500 00
Jarvis.....	Gloucester...	Carlton	2,115	3ft. 9in. x 2ft. 6in.	"	10,570 00
John	King.....	Queen	1,240	"	"	5,080 00
Jarvis.....	Bloor.....	Gloucester...	1,400	3ft. x 2ft	"	4,700 00
James.....	Queen.....	Louisa	702	2ft. 6in. x 1ft. 3in.	"	1,640 00
John.....	Queen.....	Grange Road.	693	"	"	1,600 00
John.....	Front.....	Wellington..	500	"	"	1,190 00
John.....	Wellington...	King.....	462	2ft x 1ft. 3in.	"	920 00
Jordan	King.....	Wellington..	425	"	"	890 00
John.....	Baldwin	Cecil.....	426	15in.	Tile.	560 00
King.....	George.....	Sherbourne .	600	4ft. 6in. x 2ft. 6in.	Brick.	3,000 00
King.....	Yonge.....	Jarvis.....	1,550	"	"	6,300 00
King.....	Yonge.....	Simcoe.....	2,125	"	"	9,800 00
King.....	John.....	Simcoe.....	1,000	3ft. 9in. x 2ft. 6in.	"	3,900 00
King.....	Niagara.....	Bathurst.....	1,299	3ft. x 2ft.	"	3,800 00
King.....	Peter.....	John.....	600	"	"	1,700 00
King.....	Parliament..	Sumach.....	1,629	"	"	4,300 00
King.....	Garrison C'k.	Railway C'g ..	2,700	"	"	6,485 00
Kingston Rd	Mill.....	Eastern Av....	6,399	3ft. 6in. x 2ft. 4in.	"	19,958 00
King.....	Sherbourne..	Berkeley.....	957	3ft. x 1ft. 9in.	"	2,240 00
King.....	Berkeley.....	Creek	349	"	"	700 00
King.....	Niagara.....	Creek	400	18in.	Tile.	720 00
Kerr's Lane.	Spadina Av..	535ft. west...	560	15in.	"	992 00
Lumley.....	Arthur.....	College.....	1,101	3ft. x 2ft.	Brick.	1,150 00
Lippincott...	College.....	Bloor	3,189	"	"	7,594 00
Lumley.....	Queen.....	Arthur	2,360	24in.	"	4,695 00
Louisa.....	Yonge.....	Terauley.....	760	18in.	Tile.	1,400 00
Louisa.....	Terauley.....	Elizabeth.....	400	"	"	800 00
Lippincott...	Nassau.....	College.....	720	"	"	7,241 50
Lisgar.....	Saurin.....	Queen.....	1,550	"	"	2,572 50
Larch.....	Grange Av....	St. Patrick...	399	"	"	633 00
Leonard Av.	Nassau.....	Bellevue Pl.	699	"	"	1,388 00
Linden.....	Sherbourne .	Huntley.....	630	"	"	1,630 00
Lisgar.....	Saurin.....	Dundas	85	"	"	1,854 00
Lewis.....	Eastern Av.	Kingston Rd.	981	"	"	1,840 00
Lorne.....	35 ft. south of Front	The Bay.....	351	"	"	990 00
Lowther Av.	Avenue Rd...	West end....	669	"	"	1,120 00
Lombard	Church.....	Victoria.....	606	"	"	1,221 00
Locust.....	Sumach.....	Easterly	400	15in.	"	775 00
Lakeview Av.	Dundas.....	North end...	700	"	"	1,350 00
Lennox.....	Bathurst.....	Lippincott...	315	"	"	475 00

APPENDIX D. — *Continued.*

Street.	From	To	Length in lineal feet.	Size.	Description.	Cost.
Langley Av.	Broadview A.	980 feet east.	980	15in.	Tile.	\$ c. 1,199 00
Louisa	Elizabeth	Chestnut	201	"	"	323 00
Lowther Av.	Creek	Easterly	490	9in.	"	1,050 00
Lane south of Robinson	East from	Muter	236	12in.	"	310 00
Lane bet Richmond and Nelson .	Duncan,	East end.....	537	18in.	"	952 00
Lane bet. Victoria and Yonge.....	Gerrard	Gould	798	"	"	918 00
Lane bet. Queen and Richmond ...	Simcoe	Duncan	580	15in.	"	960 00
Lane bet. Victoria and Yonge.....	Gerrard	Wilton Av...	1,275	"	"	1,319 00
Lane bet. Bond and Church	Gould	Wilton Av...	600	"	"	1,000 00
Lane bet. Nelson and Adelaide	Duncan	Easterly	600	"	"	485 00
Lane bet. Queen and Richmond ...	Bathurst.....	Tecumseth...	648	"	"	1,207 00
Lane	Vanauley	West end....	261	"	"	387 20
Lane bet. Yonge and Jordan	Melinda	Wellington...	249	"	"	421 00
Lane bet. Adelaide and Nelson	Duncan	West end....	120	"	"	203 31
Lane off McCaul	McCaul	West end....	501	"	"	733 00
Lane bet. Queen and Richmond ...	Niagara	Richmond ...	450	"	"	700 00
Lane bet. Foxley and Argyle	Argyle	Dovercourt R	810	"	Pipe.	1,124 00
Lane bet. Queen and Richmond ...	Church	E. terminus.	489	"	"	548 00
Lane bet. Front and Esplanade....	The Bay	E. Terminus.	729	"	"	1,078 00
Lane off Adelaide	Adelaide.....	N. then W...	166	12in.	"	340 00

APPENDIX D —Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c.
Lane off Clinton	Clinton	Hope	321	12in.	Pipe.	410 50
Lane bet. King and Colborne.....	West Market	Church	471	"	"	586 70
Lane bet. Front and Colborne.....	West Market	Church	420	"	"	587 30
Lane bet. Queen and Richmond ...	Church	Clare	240	"	"	315 00
Lane bet. Jarvis and Mutual	Shuter.....	Jarvis.....	600	"	"	727 50
Lane bet. Jarvis and George.....	Shuter.....	Jarvis.....	606	"	"	752 00
Lane west of Yonge.....	Yonge St. Av	Grenville....	240	"	"	314 00
Lane south of King	Niagara.....	Walnut Av...	489	"	"	427 50
Lane bet. King and Mercer.....	Peter.....	John.....	720	"	"	799 00
Lane rear of Bathurst.....	Niagara.....	Douro.....	291	"	"	285 00
Lane rear of Caer Howell.	William.....	E. terminus.	150	"	"	151 75
Lane off Muter	South of Robinson....		240	"	"	323 00
Lane bet. Mercer and Wellington..	Peter.....	John.....	681	"	"	836 00
Mutual	Shuter.....	Wilton Av ...	570	5ft. x 3ft. 6in.	Brick.	2,270 00
McCaul.....	D'Arcy	Anderson ...	300	3ft. x 2ft.	"	900 00
Major	Floor.....	College	3,228	"	"	8,356 00
Murray	Caer Howell.	Univ's'ty Ck	1,020	"	"	5,552 00
Mercer	John	Peter.....	690	2ft. 9in. x 1ft 6in.	"	1,600 00
Melinda	Bay	Yonge	564	2ft. 6in x 1ft. 3in.	"	1,130 00
Muter	Queen	Arthur	1,954	24in.	"	4,428 50
Maitland	Yonge	Church	900	"	"	1,500 00
Magill	Church	Westerly	600	"	"	1,000 00
Maitland	Church	Jarvis	639	18in.	Tile.	1,080 00
M'Dougall's L.	Richmond ..	Queen	250	"	"	631 00
Maple	Dundas.....	Dovercourt R	999	"	"	1,579 00
McGill	Church	Mutual	411	"	"	885 00
Medcalfe	Winchester .	Northerly ...	375	"	"	900 00
Morris.....	Spadina Av .	W. of Huron.	408	"	"	628 00
McGill.....	Yonge	Easterly	411	"	"	1,134 32

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c.
McCaul.....	Grange Road.	Anderson	708	"	"	1,439 00
Maple	Carlton	North end ...	261	"	"	644 20
Markham	College	Buller	1,281	"	"	2,947 00
Markham	College	Arthur	1,449	"	"	3,180 00
Markham	Arthur	Robinson	1,449	"	"	2,642 85
Muter	College	Arthur	1,452	"	"	3,375 00
Murray	York	E. terminus.	771	"	"	1,160 00
McGee	Kingston Rd.	Eastern Av .	981	"	"	1,761 50
Markham	Queen	Robinson	600	"	"	955 00
Morse	Kingston Rd.	Bay	2,100	"	"	2,485 00
Mutual	Wilton Av...	Gerrard	1,260	15in.	"	2,100 00
Murray	Caer Howell	Northerly	850	"	"	1,400 00
McCaul.....	Caer Howell.	College	1,025	"	"	1,700 00
M'Pherson A	Yonge	West end	1,330	"	"	2,200 00
Marlboro' A.	Yonge	West end	1,330	"	"	2,000 00
Mutual	Gerrard	Carlton	711	"	"	1,163 80
Medcalfe	Carlton	60 ft. south of Winchester .	429	"	"	587 00
Mutual	Queen	Shuter	650	12in.	"	850 00
Montague Pl.	Homewood A	Westerly	300	"	"	400 00
McMurrich .	Exist'g sewer	Belmont	261	"	"	399 00
Morrison	Adelaide	South term.	231	"	"	367 00
Maud	Richmond ...	Adelaide.....	441	"	"	610 00
Maitland Pl.	Homewood A	Westward ...	330	"	"	530 00
Nassau	Spadina Av.	Grosvenor A.	819	3ft. x 2ft.	Brick.	2,200 00
North	St. Mary.....	Bloor	792	24in.	"	1,580 00
Nelson	John	Duncan	450	"	"	1,230 00
Nelson	Duncan	Simcoe	561	18in.	"	940 00
Nassau	Bellevue Av.	Lippincott ...	528	"	"	895 00
Northcote A.	Saurin.....	Queen	1,550	"	"	2,585 50
Niagara	Bathurst.....	Tecumseth...	625	"	"	1,168 20
Niagara	King	Adelaide.....	450	"	"	1,364 00
Niagara	Adelaide.....	Richmond ...	500	"	"	900 00
Niagara	King	Douro	520	"	"	850 00
Niagara	Portland.....	Bathurst.....	690	"	"	1,150 00
New Kent R.	Yonge	West limit...	1,330	15in.	"	2,200 00
North Drive.	Woodland A.	Line bet. lots 17 and 18.	411	"	"	342 00
N. Mutual ...	Alexander ...	Maitland	330	12in.	"	540 75
New	Davenport R.	West term...	270	"	"	325 00
Ontario	Queen.....	Carlton	3,258	3ft. x 2ft.	"	10,800 00
Ontario	Carlton	Howard	2,880	"	"	7,662 50
Osgoode	Chestnut	Centre	300	2ft. 6in. x 1ft. 3in.	"	700 00
Ontario	Duchess	Southerly	379	"	"	756 00
Oak	Parliament...	Sumach	1,374	18in.	Pipes.	1,454 00
Oxford	Spadina Av.	Grosvenor A.	753	"	"	1,311 00
Oxford	Bellevue Av.	Lippincott ...	429	"	"	623 00
Orde	Murray	Westerly	318	"	"	1,000 00
Oxford	Grosvenor A.	Bellevue Av.	300	15in.	"	545 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
Ontario	Queen.....	Duchess	261	"	"	\$ c. 639 45
Oak	Sumach	River Don....	1,119	"	"	1,863 40
Ontario Pl ...	Ontario	Westerly	309	12in.	Tile.	429 50
Parliament... Queen.....	King .....	.....	1,200	5ft. x 3ft. 3in.	Brick.	4,467 00
Parliament... King.....	Front .....	.....	700	5ft. x 3ft. 6in.	"	3,400 00
Parliament... Front.....	Outlet .....	.....	650	"	"	4,400 00
Parliament... Wellesley...	Winchester..	.....	849	3ft. 9in. x 2ft. 6in.	"	3,120 00
Parliament... Winchester	Queen .....	.....	1,899	3ft. x 4ft. 6in.	"	14,011 00
Parliament... Winchester	Queen .....	.....	1,998	2ft. 6in. x 3ft. 9in.	"	6,800 00
Peter	Queen	Front	2,058	3ft. x 1ft. 9in.	"	4,900 00
Pembroke	Shuter	Gerrard	1,809	2ft 9in x 1ft 10in	"	4,000 00
Portland	King	Adelaide.....	1,130	18in.	Tile.	2,000 00
Power	King	Queen	925	"	"	1,850 00
Prospect	N. Berkeley.	Parliament..	354	"	"	748 00
Portland	Adelaide ..	Richmond ..	489	"	"	863 00
Portland	Wellington P	s of Front...	600	"	"	638 25
P. Arthur A.	Avenue Rd...	West end....	660	"	"	1,050 00
Peel Av.	Gladstone A.	Dufferin	369	15in.	"	540 00
Portland	Richmond ..	Queen	261	"	"	440 00
Princess	Duke.....	King	300	"	"	543 00
Price	Yonge	Easterly	600	12in.	"	800 00
Park Road...	Yonge	500 ft. east...	500	"	"	880 00
Queen	Jarvis.....	Sherbourne..	.....	4ft.	Brick.	.....
Queen	Beverley ..	John	300	3ft. 9in. x 2ft. 6in.	"	1,100 00
Queen	Sherbourne..	Parliament ..	1,420	"	"	4,568 00
Queen	Dufferin	Brewery C'k	4,650	3ft. 6in. x 2ft. 4in.	"	12,890 00
Queen	Sherbourne ..	Westerly	282	3ft x 2ft.	"	1,000 00
Queen	reek	Lumley	1,050	"	"	2,385 00
Queen	Lumley	Brock	4,116	"	"	12,100 00
Queen	Simcoe	Elizabeth	1,086	2ft. x 3ft.	"	3,200 00
Queen	Elizabeth	Yonge	1,200	"	"	3,600 00
Queen	River	Sumach	621	3ft. x 2ft.	"	2,178 40
Queen	Peter	Beverley.....	420	"	"	1,200 00
Queen	Brock	Peter	807	3ft. x 1ft. 9in.	"	1,500 00
Queen	Yonge.....	Jarvis	1,446	"	"	3,800 00
Queen	John	William	700	24in.	"	1,240 00
Queen	St. Patrick's	.....	.....	.....	.....	.....
Queen	Market	Simcoe	800	"	"	1,400 00
Queen	Yonge	Victoria	300	"	"	600 00
Queen	Parliament...	Power	309	18in.	Pipe.	650 00
Queen	Trefanne....	Sumach	1,182	"	"	2,485 00
Queen's Park	Mr. Howlands	Fountain	399	12in.	"	500 00
Richmond	Bathurst	Tecumseth...	650	3ft. x 2ft.	Brick.	1,950 00
River	Queen	Gerrard	2,379	"	"	6,182 75
Richmond	Brock	Bathurst.....	.....	"	"	4,695 20
Richmond	Simcoe	York	612	2ft. 6in. x 1ft. 3in.	"	1,200 00
Richmond	York	Bay	804	"	"	1,600 00
Richmond	Bay	Yonge.....	568	"	"	1,200 00
Richmond	Yonge.....	Church	858	2ft. x 1ft. 3in.	"	1,654 00

APPENDIX D.—Continued.

Street.	From	From	Length in lineal feet.	Size.	Descrip- tion.	Cost.
Richmond ...	Church	Jarvis	594	2ft. x 1ft. 3in.	Brick.	\$ ^{c.} 1,200 00
Robison	Bathurst.....	Muter	585	24in.	"	980 00
Richmond ...	Peter.....	John	699	18in.	"	1,233 57
Regent	Sydenham	St. David's ...	500	"	"	1,466 25
Renfrew	Grange Rd.....	Queen	852	"	"	1,504 00
Rose Av.....	Wellesley.....	Howard	1,290	"	"	2,463 00
Rose Av.....	Prospect.....	Wellesley	405	"	"	856 00
Rolyat.....	Dundas.....	Grove Av	612	"	"	1,253 91
Regent	St. David	Wilton Av....	450	"	"	980 70
Richmond ...	Duncan	John	420	"	"	699 00
Richmond ...	Niagara.....	Tecumseth....	825	"	"	2,532 10
Robert	College	Bloor	3,909	"	"	7,200 00
Richmond ...	Church	Jarvis	660	"	"	1,513 00
Robinson ...	Muter.....	Lumley	249	15in	"	400 00
Russel.....	Huron.....	St. George....	510	"	"	850 00
Roxborough.	Yonge.....	Rosedale Rd.	1,000	"	"	1,600 00
Reid	Sackville ...	Easterly	300	"	"	500 00
Ross	Cecil	College	630	15in.	Tile.	1,144 25
River	Gerrard	360 ft. north.	360	12in.	"	544 00
Roden Pl	Sarah.....	Belmont	185	"	"	300 00
Rusholme R.	Dundas.....	Northerly....	660	"	"	1,104 00
Reid's Lane.	Sydenham ...	Wilton Av ...	909	"	"	973 00
Sherbourne ..	S. of Front...	The Bay	501	5ft. x 2ft. 8in.	Brick.	4,167 50
Sherbourne ..	King	Palace	850	4ft. 6in. x 2ft. 6in.	"	5,800 00
Simcoe	Outlet	Caer Howell.	4,785	4ft. 3in.	"	3,800 00
St. George ...	College	Bloor.....	3,350	3ft. 9in. x 2ft. 6in.	"	14,000 00
St. Patrick ...	Brock.....	Denison Av ..	1,150	"	"	4,000 00
Seaton.....	Queen	Gerrard	2,550	"	"	8,800 00
Strachan.....	Queen	Conway.....	2,860	3ft. x 2ft.	"	9,500 00
Seaton.....	Gerrard.....	Carlton	750	"	"	2,162 50
Sackville	Carlton	King	4,107	"	"	10,904 50
Sackville	Carlton	Winchester ..	540	"	"	1,827 00
Sumach.....	Eastern Av...	King	480	"	"	1,400 00
Sumach.....	King	Gerrard	2,871	"	"	7,650 00
Sackville	Eastern Av. .	King	450	"	"	1,400 00
St. Albans ...	Yonge.....	Surrey Place.	1,296	"	"	3,600 00
St. Joseph ...	Yonge.....	Queen's Pk. .	1,380	"	"	4,200 00
St. Patrick...	Brock	McAul	1,794	"	"	4,455 00
St. Andrews.	Brock	Vanauley ...	545	"	"	1,450 00
Sherbourne ..	Wellesley.....	Bloor	1,325	"	"	4,800 00
Sherbourne ..	King	Queen	1,749	"	"	4,845 00
Sackville	Winchester .	Amelia	231	"	"	2,383 50
Sumach	Winchester .	Amelia	231	"	"	2,000 00
Sydenham....	Ontario	Berkeley	396	3ft. x 1ft. 9in.	"	920 00
Shuter	Jarvis	Pembroke ..	650	2ft. 9in. x 1ft 10in	"	1,650 00
Sherbourne ..	Duchess	Queen	400	2ft. 6in. x 1ft. 3in.	"	800 00
Sherbourne ..	Queen	Gerrard	2,084	"	"	4,200 00
Sherbourne ..	Gerrard	Carlton	1,165	"	"	2,800 00
Sumach	Winchester .	Gerrard	850	3ft. x 2ft.	"	4,700 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Description.	Cost.
						\$ c.
Sherbourne .	Carlton	Wellesley	1,450	2ft. 3in. x 1ft. 6in.	Brick.	3,300 00
Sherbourne .	King	Duchess	800	2ft. 6in. x 1ft. 3in.	"	1,600 00
Stanley	Victoria	Jarvis	1,260	2ft. x 1ft. 3in.	"	2,500 00
St. Mary	Yonge	North	750	24in.	"	1,250 00
St. Patrick ..	Bathurst.....	Carlyle .....	.....	18in.	Tile.	456 00
Strachan Av.	Queen	King	1,563	"	"	2,600 00
Strachan Av.	Wellington .	King	474	"	"	758 00
Sullivan	Brock	Beverley.....	1,056	"	"	1,760 00
St. Patrick ..	Denison Av.	Hackney	570	"	"	960 00
Shuter.....	Yonge.....	Bond	546	"	Brick.	900 00
Selby.....	Huntley	Sherbourue .	579	"	Tile.	1,044 00
Sheppard	Richmond ...	Adelaide	402	"	"	653 75
Sydenham	Sackville	Regent.....	350	"	"	600 00
Spruce	Parliament .	Sackville	756	"	"	1,337 00
Saurin.....	Lisgar	Northcote A.	650	"	"	1,090 00
St. Mary.....	North	Queen's Park	672	"	"	1,112 00
Soho	Queen	Phoebe	430	"	"	890 75
St. James Av	Ontario	Parliament...	720	"	"	1,403 00
Spruce	Sackville	300 feet east.	351	"	"	916 00
Stafford	King	Clifford	840	"	"	1,493 00
Scollard.....	Yonge.....	Westerly	1,060	"	"	1,900 00
Sydenham	Berkeley.....	Parliament...	351	"	"	1,000 00
Sydenham	Sackville	Sumach	750	"	"	1,371 98
Sydenham	Parliament..	Regent	402	"	"	1,092 00
		300 ft. E Sack-				
Spruce	Sumach	ville.....	402	"	"	738 62
Shaw	Cecil	Queen	1,521	"	"	1,850 00
Sumach	Amelia	Wellesley....	351	"	"	566 00
Spruce	Sumach	600 feet east.	600	"	"	893 00
South Drive.	Present Ter.	S. limit lot 42	270	"	"	372 00
Shaw	Halton	The Bridge...	351	"	"	577 00
South Drive.	.....	.....	291	"	"	500 00
		200 ft. east of				
St. David	Sumach.....	Parliament...	1,251	"	"	2,479 15
Sussex Av ...	Huron.....	St. George ...	441	"	"	848 50
Soho	Phoebe.....	Bulwer	200	"	"	3,415 40
Sheridan	Florence.....	Bank	850	"	"	1,700 00
Saulter	Kingston Rd.	Eastern Av....	990	"	"	1,906 57
Scadding	Kingston Rd.	Eastern Av....	984	"	"	1,800 00
Strange	Kingston Rd.	Eastern Av....	981	"	"	1,749 00
Sheppard L.	Bathurst.....	Westerly	300	15in.	"	500 00
Sword	Gerrard	Northerly ...	450	"	"	720 00
St. Vincent.	St. Albans...	Northerly ...	330	"	"	655 83
Stafford	King	Wellington .	450	"	"	843 00
Shuter.....	Pembroke ...	Sherbourne .	360	"	"	685 00
St. Charles...	Chapel L.....	Yonge.....	681	"	"	1,440 00
Stewart	Bathurst.....	Portland	690	"	"	1,015 75
St. David	Parliament..	Easterly	219	12in.	"	495 00
St. Vincent...	Grenville	Grosvenor ...	250	"	"	320 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
Shuter.....	Dalhousie	Jarvis	540	12in.	"	\$900 00
Sultan.....	East end.....	St. Thomas...	80	"	"	821 50
St. Thomas...	Sultan.....	Czar	80	"	"	820 00
Surrey Pl....	Breadalbane.	Grosvenor ...	369	"	"	646 14
St. Albans ...	Surrey Pl....	Westerly	231	"	"	428 00
Sultan	St. Thomas ..	West end.....	201	"	"	340 00
Sarah	Belmont	McMurrich ..	185	"	"	250 00
Suffolk Pl....	Homewood A ..	West end.....	339	"	"	519 00
Toronto	King	Adelaide.....	443	2ft. 9in. x 1ft. 6in.	Brick.	890 00
Terauley.....	Queen	Elm	1,716	2ft. 6in. x 1ft. 3in.	"	3,800 00
Trefann	Queen	North end ...	489	18in.	Tile.	798 50
Tecumseth....	Queen	King	1,150	"	"	1,838 00
Trinity	King	Eastern Av....	429	"	"	660 75
Temperance..	Bay	Yonge	585	"	"	945 00
Terauley.....	Elm	College Av....	1,175	15in. x 12in.	"	1,950 00
Tecumseth....	King	Niagara.....	720	15in.	"	1,099 00
Trafalgar Av.	Dufferin	Gladstone A ..	369	"	"	724 60
Trinity Sq....	Yonge	Trinity Ch....	264	12in.	"	350 00
Tait	Beachall	West end.....	1,131	"	"	998 00
University C.	Murray	Bloor	3,999	3ft x 2ft.	Brick.	15,495 00
University ...	Queen	Edward.....	2,700	18in.	Tile.	2,155 50
University ...	Edward.....	Avenue Rd....	1,668	"	"	2,870 00
Ulster	Bathurst	Lippincott...	306	15in.	"	478 00
Ulster	Lippincott ...	Borden	330	"	"	860 00
Victoria	Adelaide	Queen	774	2ft. 6in. x 1ft. 3in.	Brick.	1,550 00
Vanauley ...	Queen	Northerly....	940	3ft. x 2ft.	"	2,700 00
Victoria	Queen	Gould	1,830	2ft. 6in. x 1ft. 3in.	"	3,800 00
Victoria	Gould	Gerrard	700	18in.	"	1,400 00
Victoria St. L	Queen	Gould	1,830	12in.	Tile.	2,243 00
Wilton Av....	Jarvis	Mutual	350	5ft. x 3ft. 6in.	Brick.	1,400 00
Wellington P	Brock	Portland.....	1,365	3ft. x 2ft.	"	4,100 00
West Market	King	Front	300	"	"	850 00
Waterloo Av.	.....	.....	1,629	.....	"	9,000 00
Wellington .	Church	Yonge.....	816	3ft. x 1ft. 9in.	"	1,600 00
Wellington .	Yonge.....	Bay	621	3ft. x 2ft.	"	2,212 00
Wellington .	Simcoe	Peter	1,650	2ft. 9in. x 1ft. 6in.	"	3,300 00
Wellington .	York	Yonge.....	1,500	2ft. x 1ft. 3in.	"	2,800 00
Wellington .	Bay	Simcoe	1,419	"	"	2,800 00
West Market	Front	Outlet	550	1ft. 6in. x 2ft. 3in.	"	920 00
Wood	Yonge.....	Church	1,000	24in.	"	1,560 00
Wood	Church	Mutual	402	"	"	1,057 06
Walton	Terauley.....	Elizabeth	354	18in.	Tile.	635 50
Wilton Av....	Berkeley	Parliament...	321	"	"	742 00
West	Tecumseth....	West end.....	400	"	"	620 00
Woolsley ...	Bathurst	Esther	2,100	"	"	1,793 00
Waterloo Av.	Dufferin	Gladstone Av	390	"	"	690 95
Wilton Av....	Ontario	Berkeley	324	"	"	584 70
Wilton Av....	Sumach	Easterly	192	"	"	534 00
Wilton Av....	River	450 ft. west .	450	"	"	950 00

APPENDIX D.—Continued.

Street.	From	To	Length in lineal feet.	Size.	Descrip- tion.	Cost.
						\$ c.
Winchester	Medcalfe	Sackville	429	18in.	Tile.	1,030 00
Winchester	Sackville	Sumach	750	"	"	1,499 82
Winchester	Medcalfe	Westerly	210	"	Pipe.	550 00
Wellington	Niagara	Creek	420	"	"	700 00
Wellesley	Sumach	450 ft. west...	450	"	"	703 00
Wilton Av...	Sackville	Parliament .	699	"	"	1,440 00
Wilton Av...	River	450 ft. west...	480	"	"	875 00
Wilton Av...	Seaton .	Ontario	240	"	"	544 00
Wilton Av...	Seaton .	175 ft. west...	231	"	"	439 40
Wellesley	Parliament...	280 ft. east of Sackville...	1,080	"	"	1,665 00
Wilton Av...	Sackville	Sumach	720	"	"	1,692 00
Winchester	Ontario	Parliament...	699	15in.	"	1,000 00
Wellington P	Brock	Clarence Sq.	350	"	"	700 00
Widmer	King	Adelaide....	500	"	"	800 00
Wellesley	Yonge	Church	650	"	"	1,100 00
Wellesley	Bleeker	Ontario	441	"	"	750 00
Wellesley	Ontario	Parliament...	705	"	"	1,200 00
Willcox	St. George ...	Huron	381	"	"	600 00
Walton	Yonge	Westerly	517	"	"	820 00
Wellesley	Church	Jarvis	699	"	"	1,165 00
Wellington A	Stafford	Strachan	300	"	"	534 00
Walker Av...	Yonge	West end....	1,350	"	"	1,915 00
Walnut Av...	Wellington A	King	540	"	"	783 00
Walton	Terauley	Present term.	189	12in.	"	337 00
Walter	McMurrich .	Westerly	291	"	"	530 00
Willcox	Huron	Robert	930	15in.	"	1,450 00
Washing'n A.	Spadina Av.	Huron	525	"	"	711 90
Wellesley Cr.	Homewood A	150 ft. east...	150	"	"	277 00
Woodland A.	Bridge	North Drive.	900	"	"	1,400 00
Yonge	King	Outlet	1,075	5ft. x 3ft. 6in.	Brick.	7,200 00
Yonge	King	Queen	1,360	5ft. x 3ft.	"	8,900 00
Yonge	Wilton Av...	Queen	1,300	4ft. 6in. x 3ft.	"	6,800 00
Yonge	Anne	Wilton Av...	1,700	3ft. 9in. x 2ft. 6in.	"	7,000 00
Yonge	Belmont	Severn's B'y.	759	3ft. x 2ft.	"	2,483 00
Yonge	Creek	Anne	900	"	"	3,000 00
Yonge	Maitland ...	Creek	400	2ft. 9in. x 1ft 10in	"	1,000 00
York	King	Front	858	2ft. 9in. x 1ft. 3in.	"	1,750 00
Yonge	Bloor	Maitland ...	2,400	24in.	"	5,600 00
Yonge	Creek	Walker Av...	2,100	3ft. 9in. x 2ft. 6in.	"	8,400 00
Yonge	Creek	Bloor	2,300	3ft. x 2ft.	"	7,600 00
Yonge St. Av.	Yonge	Westerly	471	18in.	Tile.	950 15
Yonge	Bloor	Bismarck Av.	381	"	"	708 00
Yonge St. Av	University C.	W. of Yonge.	1,500	"	"	4,048 00
York	60ft. S. Front	The Bay	459	"	"	1,301 00
Yorkville Av	Hazelton Av.	Yonge	1,518	15in.	"	2,500 00
Yorkville Av	Hazelton Av.	Avenue Rd...	500	12in.	"	750 00

Total cost of sewers, all sizes, constructed to December 31st, 1885... \$1,552,557.37

APPENDIX E.

List of Cedar Block Roadways Constructed during the year 1885.

Street.	From	To	Width.	Length.
			ft.	ft.
Avenue Rd.....	Bloor	Davenport Rd.....	32	2,250
Carlton	Sackville	Sumach	24	630
Classic Pl.	Huron	St. George	22	400
College Av.....	Yonge.....	McCaul.....	43·8	2,760
Crawford	Queen	Arthur	30	1,840
Dean	Wilton Av.....	200 feet west.....	24	200
Front.....	Yonge.....	Church	58	920
Gifford	Spruce	Carlton	24	400
Huron	Sussex Av.....	Bloor	24	720
Lane bet. Front and Esplanade	Scott	East terminus.....	22	250
Lippincott	Nassau	Bloor	24	4,040
Lowther Av.....	Avenue Rd.....	West terminus	22	630
Markham	Queen	College	24	3,400
Medcalf	Carlton	Winchester	19	450
Mercer	John	Peter	24	620
McGee	Queen	Eastern Av.....	24	950
McPherson Av.....	Avenue Rd.....	Westerly	24	1,350
Niagara	Bathurst	King	32	1,650
Orford Av.....	Parliament.....	Easterly	18	250
Oxford	Bellevue Av.....	Grosvenor Av.....	24	300
Prince Arthur Av...	Avenue Rd.....	West terminus.....	24	650
Richmond Pl.....	Richmond	South terminus.....	18	200
Rolyat.....	Dundas	Grove Av.....	24	560
Stafford	King	Defoe	24	400
Sumach	Amelia	Wellesley.....	24	260
Sussex Av.....	St. George	Huron.....	24	400
Wellesley	Sackville	Sumach	24	630
Yonge	Bloor	Railway crossings...	42	4,100
York	King	Front	42	900
				32,110

Cedar and Gravel Roadway.

Street.	From	To	Width.	Length.
			ft.	ft.
Carlaw Av	Eastern Av.....	The Bay	33	1,050

Cobble Stone Roadways.

Street.	From	To	Width.	Length.
	Lane bet. Front and Colborne.....	Colborne	ft. 14	ft. 180
Lanes S. of Colborne				
Lane bet. Mercer and Wellington...	Peter.....	John	14	620
Lane bet. Mercer and King	Peter	John	14	620
				2,020

Cedar Black Roadways, 32,110 feet = 6.08 miles.

Cedar and Gravel 1,050 " = .20 "

Cobble Stone 2,020 " = .38 "

6.66 miles.

APPENDIX F.—LIST OF CEDAR BLOCK PAVEMENTS CONSTRUCTED IN 1885, AND THEIR COST.

No.	Street.	From	To	Pavement per yard.	Kerb, per foot.	Kerb, per foot, stone.	Width.	Number square yards paving.	Number of feet kerb.	Cost of Culverts.	Cost of Inspection.	Total cost of work.	Time of completion.	Contractor.
				\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	ft. c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	\$ c. \$ c.	c. \$ c.	
132	Avenue Rd.	Bloor	Davenport R.	0 59 0 16	.....	.....	30	8352	4757 223 07	112 50	c.	1885.	1885.	Ardagh & Leonard.
133	Carlton	Parliament	Sumach	0 95 0 25	.....	.....	24	4295	3469 146 56	97 50	"	74 May 22	"	A. J. Brown.
135	College Av.	Yonge	McCaul	0 68 0 15	.....	.....	43-8	14129	5583 695 58	102 50		39 "		Ardagh & Leonard.
136	Dean	Wilton Av.	200 feet west.	0 63 0 18	.....	.....	16	593	448 35 03	25 00		70 Oct. 17		Ardagh & Leonard.
137	Front	Yonge	Church	1 27	.....	0 95	58	6172	2007 490 68	162 50		43 Sep. 5		W. Jones.
138	Gifford	Spruce	Carlton	0 65 0 17	.....	.....	24	1118	876 58 45	37 50		70 July 2		R. Dinnis.
139	Huron	Sussex Av.	Bloor	0 63 0 18	.....	.....	24	2288	1628 5 75	62 50		82 June 18		Ardagh & Leonard.
140	L. bet. Front & Esplanade.	Scott	East term	0 69 0 20	.....	.....	22	946	403 24 12	32 50		29 July 8		R. West.
141	Lippincott	Nassau	Bloor	0 99 0 24	.....	.....	24	11268	8767 746 79	85 00		96 June 3		Ardagh & Leonard.
142	Lowther	Avenue Rd.	West term	0 64 0 15	.....	.....	22	1685	1472 36 15	50 00		39 June 6		W. Jones.
143	Markham	Queen	College	0 67 0 15	.....	.....	24	9283	7350 193 34	102 50		35 Aug. 24		C. Farquhar.
144	Medcalf	Carlton	Winchester	0 49 0 15	.....	.....	19	993	1066 4 68	15 00		35 July 20		Ardagh & Leonard.
145	Mercer	John	Peter	0 69 0 20	.....	.....	24	1773	1342 315 05	37 50		52 Nov. 9		Burns & McCormack.
146	McGee	Queen	Eastern Av.	0 53 0 14	.....	.....	24	2550	2194 91 46	55 00		12 May 18		Ardagh & Leonard.
147	Niagara	Bathurst	King	0 55 0 14	.....	.....	32	6376	3779 175 61	95 00		32 Nov. 3		Ardagh & Leonard.
148	Oxford	Bellevue A.	Grosvenor A.	0 62 0 15	.....	.....	24	1186	885 77 09	47 50		31 Dec. 10		Ardagh & Leonard.
149	Richmond Pl.	Richmond	South term.	0 63 0 15	.....	.....	18	402	421 68 77	15 00		66 Sep. 9		C. Farquhar.
150	Rolyat	Dundas	Grove Av.	0 55 0 17	.....	.....	24	1545	1216 60 76	20 00		18 Oct. 27		R. West.
151	Sumach	Winchester	Wellesley	0 85 0 26	.....	.....	24	2770	2204 49 68	40 00		43 May 5		Ardagh & Leonard.
152	Wellesley	Sackville	Sumach	0 47 0 15	.....	.....	24	1924	1534 49 47	47 50		08 June 13		Ardagh & Leonard.
153	Yonge	Bloor	Rly's Cross'gs.	1 24 0 25	.....	.....	42	9763	8227 914 28	187 50		95 Nov. 19		G. Farquhar.
154	York	King	Front	0 80	.....	0 89	42	4528	1805 484 86	60 00		51 July 28		W. Jones.
												17 June 12		Ardagh & Leonard.

APPENDIX G.

Cedar Block Roadways under contract.

Carlton Street, Yonge Street to Parliament Street.....	3,900 ft.
Queen Street, Don bridge to Greenwood's Lane (under construction)	3,300
Ontario Street, Ontario Place to west terminus.....	320
Clarence Street, Wellington Street to north end.....	250
Stafford Street, King Street to Adelaide Street (under construction)	400
Henderson Avenue, Hope Street to Clinton Street.....	300
Boswell Avenue, Avenue Road to western terminus.....	600
	<hr/> 9,070 ft.

Stone Paving.

Wellington Street, Yonge Street to Bay Street.....	600
--	-----

Grading and Bridging.

Shaw Street, Arthur Street to Bloor Street (under construction)...	4,600
--	-------

APPENDIX H.

The expenditure for labor by Ward Foremen for the year 1885 amounted to \$38,135.52, divided as follows :—

Repairing block paving.....	\$1,095 53
Cleaning culverts and carting away the earth.....	3,379 94
Cleaning out gullies and carting away the earth.....	6,356 83
Spreading stone and filling holes in the street.....	6,096 08
Laying and repairing sidewalks.....	13,002 79
Cleaning crossings and renewing same.....	2,104 51
Making box drains, cutting thistles, shovelling snow, repairing boulevards, and other general work.....	6 099 84
	<hr/> \$38,135 52

APPENDIX I.

A List of Streets Opened during the Year 1885.

Street.	From	To.	Length.
Bolton Street.....	Present terminus.....	Gerrard Street.....	450
Crawford Street.....	Eastern terminus.....	Bolton Street.....	150
DeGrassi Street.....	Present terminus.....	Gerrard Street.....	450
Florence Street.....	Western terminus....	Brock Avenue.....	350
Langley Avenue.....	Logan's lane.....	Eastern terminus.....	900
Lefroy Street.....	Logan's line.....	Boulton Street.....	1,100
Marguerita Street....	Dundas Street.....	Bloor Street.....	3,300
Middleton Street.....	Sheridan Street.....	Brock Road.....	420
McPherson Avenue...	Present terminus.....	Avenue Road.....	630
Maude Street.....	Emily Street.....	South terminus.....	320
Pape Avenue.....	Widened.....		6,531
Sussex Avenue.....	Robert Street.....	Major Street.....	200
Victor Avenue.....	Broadview Avenue....	Easterly.....	1,600
			<hr/> 16,401

Length of City streets, year ending 1884..... 163·16 miles.

New streets opened during 1885, 16,401 feet..... 3·14 “

Total miles of streets. 166·30 “

APPENDIX J.

Tensile Strength of a number of Samples of Cements of various brands tested throughout the year.

BRAND.	Weight per bushel.	Residue per cent. after sifting through sieves Nos.		Placed in water hours after gauging.	Time in water.	Tensile strength per sq. inch of section hav- ing remained in water the whole time.	REMARKS.
		50	70				
Portland (K. B. and S.)	2 days	1 year	lbs. 500	Neat.
"	"	"	475	"
"	30 min.	"	550	"
"	2 days	7 months.	400	"
"	30 min.	4 months.	375	"
"	10	20	48 hours.	1 month.	200	"
"	"	"	24 hours.	13 days.	250	"
"	8	12	3 days	6 days.	200	"
"	"	"	4 hours.	24 hours.	100	"
"	13	27	24 hours.	6 days.	50	3 to 1 good, coarse sand, sifted this sieve, No. 24.
"	13	27	"	"	30	
"	"	"	"	"	50	
"	"	"	"	"	35	3 to 1 fine sand.
"	"	"	"	"	45	
"	"	"	"	"	40	
"	"	"	"	"	35	3 to 1 coarse sand.
"	"	"	"	2 months.	125	
"	"	"	"	"	110	
"	"	"	"	"	80	Equal parts of fine and coarse sand.
"	"	"	"	"	50	
"	"	"	"	"	70	
"	"	"	"	"	70	Neat.
"	"	"	"	"	60	
Portland (Wallsend, Newcastle).	5	17	"	1 month.	320	

APPENDIX J.—Continued.

BRAND.	Weight per Bushel.	Residue per cent. after sifting through sieves Nos.		Placed in water hours after gauging.	Time in water.	Tensile strength per sq. inch of section hav- ing remained in water the whole time.	REMARKS.
		50	70				
Portland (Wallsend, Newcastle).	5	17	24 hours..	1 month...	lbs. 330	Neat.
"	3	20	" "	10 " "	200	"
"	"	"	" "	" "	200	"
"	"	"	" "	" "	200	"
"	"	"	" "	24 hours...	100	"
"	"	"	" "	" "	90	"
"	"	"	3 hours...	" "	90	"
"	"	"	" "	" "	85	"
"	"	"	24 hours...	" "	130	"
"	3	17	" "	" "	135	"
"	"	"	" "	" "	530	"
Portland (Lion, German)	1 hour.....	1 year.....	180	"
Portland (Union, Newcastle)	" "	7 days.....	150	"
"	" "	" "	160	"
"	" "	6 days.....	135	"
"	" "	" "	150	"
"	" "	" "	180	"
Portland (Francis Bros.)	24 hours...	30 days...	325	"
"	10	26	" "	" "	275	"
"	"	"	" "	" "	300	"
"	"	"	" "	" "	450	"
"	"	"	" "	" "	400	"
"	"	"	" "	3 weeks...	225	"
"	"	"	" "	10 days...	225	"
"	"	"	" "	6 days.....	250	"
"	"	"	" "	" "	250	"

"	.....	"	"	"	"	4 days.....	200	"
"	.....	"	"	"	"	6 days.....	30	3 to 1.
"	.....	"	"	"	"	30 days.....	30	"
Portland (White Bros.)	.....	6	18	"	"	.....	75	Neat.
"	.....	"	"	"	"	.....	325	"
"	.....	"	"	"	"	.....	275	"
"	.....	"	"	"	"	.....	300	"
"	.....	"	"	"	"	.....	300	"
"	.....	"	"	"	"	.....	250	"
"	.....	"	"	"	"	10 days.....	225	"
"	.....	"	"	"	"	6 days.....	60	"
"	.....	"	"	"	"	.....	100	"
"	.....	"	"	"	"	.....	35	3 to 1.
"	.....	"	"	"	"	.....	30	"
"	.....	"	"	"	"	30 days.....	75	"
"	.....	"	"	"	"	.....	90	"
Portland (Johnston Bros.)	.....	10	27	"	48 hours.....	.....	350	Neat.
"	.....	"	"	"	"	.....	340	"
"	.....	"	"	"	24 hours.....	.....	125	3 to 1 coarse sand.
"	.....	"	"	"	"	.....	115	
"	.....	"	"	"	"	.....	50	3 to 1 fine sand.
"	.....	"	"	"	"	.....	60	
"	.....	"	"	"	"	.....	50	3 to 1 loamy sand.
"	.....	"	"	"	"	.....	45	
"	.....	"	"	"	"	.....	55	3 to 1 loamy sand.
"	.....	"	"	"	"	.....	60	
"	.....	"	"	"	"	.....	60	Neat.
"	.....	"	"	"	"	.....	50	
Portland (no brand given)	.....	10	23	"	7 days.....	.....	180	This cement was forwarded to the Department by private parties to be tested.
"	.....	"	"	"	"	.....	185	
"	.....	"	"	"	2 months.....	.....	250	
"	.....	"	"	"	"	.....	250	
"	.....	"	"	"	8 months.....	.....	325	
Napanee (natural cement)	.....	"	"	"	1 year.....	.....	170	Neat.
"	73 lbs.....	"	"	"	"	.....	175	"
"	.....	"	"	"	"	.....	185	"

APPENDIX J.—Continued.

BRAND.	Weight per Bushel.	Residue per cent. after sifting through sieves Nos.		Placed in water hours after quagging.	Time in water.	Tensile strength per sq. inch of material remain- ing in water the whole time.	REMARKS.
		50	70				
Napaee (natural cement)	"	10	23	24 hours...	1 year....	lbs. 175	Neat.
"	"	"	"	"	10 months.	210	"
"	"	"	"	"	"	125	"
"	"	11	3	"	7 months...	150	"
"	"	"	"	4 hours....	30 days...	65	"
"	"	"	"	2 hours....	"	65	"
"	"	"	"	"	"	65	"
"	"	"	"	24 hours...	6 days....	35	"
"	"	"	"	"	"	40	"
"	"	"	"	"	"	50	"
"	"	"	"	48 hours...	"	45	"
"	"	"	"	"	"	40	"
"	"	"	"	2 hours....	"	10	"
"	"	11	3	"	"	25	"
"	"	3	9	"	"	35	"
"	"	"	"	"	"	18	"
"	"	"	"	"	"	35	"
"	"	"	"	24 hours...	"	35	"
"	"	"	"	"	"	15	"
"	"	"	"	4 hours....	24 hours...	10	"
Thorold (natural cement)	72 lbs.	11	17	24 hours...	1 year....	.....	"
"	"	"	"	"	"	"
"	"	"	"	"	11 months	155	This was ex-
"	"	"	"	"	10 months	125	posed to air 3 days
"	"	"	"	3 days....	7 days....	50	before being tested.
"	"	"	"	"	"	30	"

The cement was firmly pressed into the molds with the trowel, and struck off level and then laid on glass.

Clean water was used at a temperature of between 60 and 70 degrees F., the room in which the briquettes were kept was also at the same temperature. The amount of water used to gauge the cement was not taken, but enough water was added to make a plastic mortar somewhat stiffer than is commonly used on the work.

Brass molds were used.

The briquettes had a breaking section of 1 square inch, one of Richte Bros. machines being used.

The sand used was the same class as that employed on the different works ; it was thought desirable to use this over any standard sand.

The weight of the cement was obtained by using a hopper and shoot, as recommended by Mr. Faija in his book on "Portland cement for users." The shoot, made of zinc or tin, being fixed to the stand at an angle of 55 degrees, and the measure placed under so as to have 5 inches between the top of the measure and the shoot.

In comparing the result of the tests made by the Department with the average minimum and maximum strength of some good cements, and given by the Committee of the American Society of Civil Engineers on a uniform system of testing, it will be seen that the fall is considerably below the average :

	Am. S. C.E. lbs.	Toronto. lbs.
Portland neat, after 1 year in water.....	450 to 800	475 to 550
" after 1 month in water.....	350 to 700	275 to 450
" after 6 days in water.....	250 to 550	150 to 250
American natural cement, neat, 1 year in water.....	300 to 400	.....
Canadian natural cement, neat .....	.....	170 to 210
American natural cement, neat, 6 days in water....	60 to 100	25 to 70

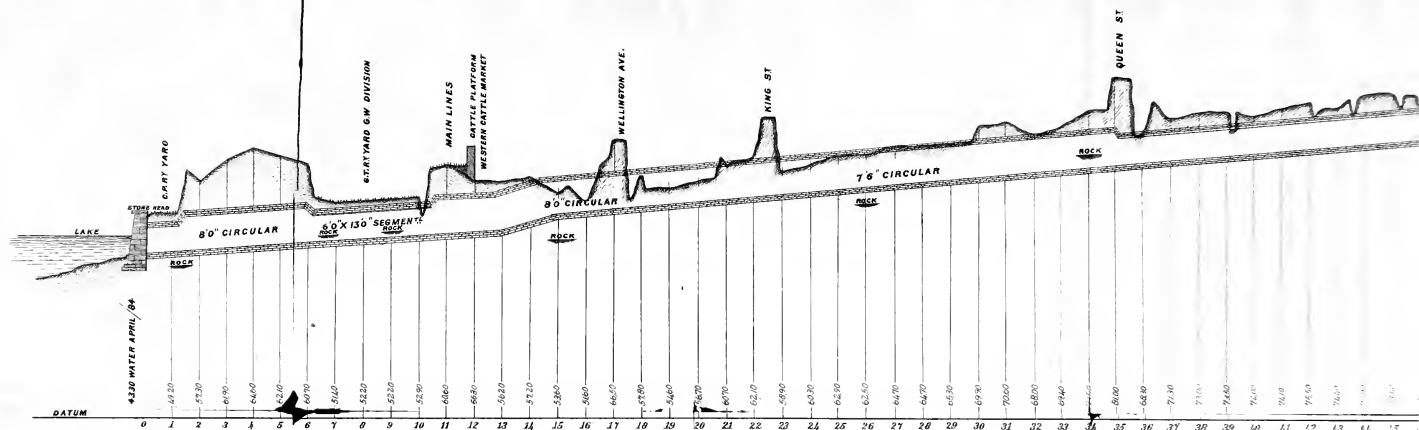
APPENDIX K.

Total length of tracks, single and double, constructed up to December 31st, 1884.

	DOUBLE.		SINGLE.	
	Length of tracks.	Curves and switches.	Length of tracks.	Curves and switches.
Constructed during 1885 :	74,650	5,390	28,820	5,600
Dundas Street, Dufferin Street to Jamieson Avenue.....	.....	.....	2,300	200
Yonge Street Avenue, Yonge to McCaul Street.....	2,800	100	.....	.....
	<u>77,450 ft.</u>	<u>5,490 ft.</u>	<u>31,120 ft.</u>	<u>5,800 ft.</u>

Being 37.38 miles of single track.

SECTION
OF
GARRISON CREEK SEWER.
SCALE HORIZ. 300' INCH.
VERT. 20' "



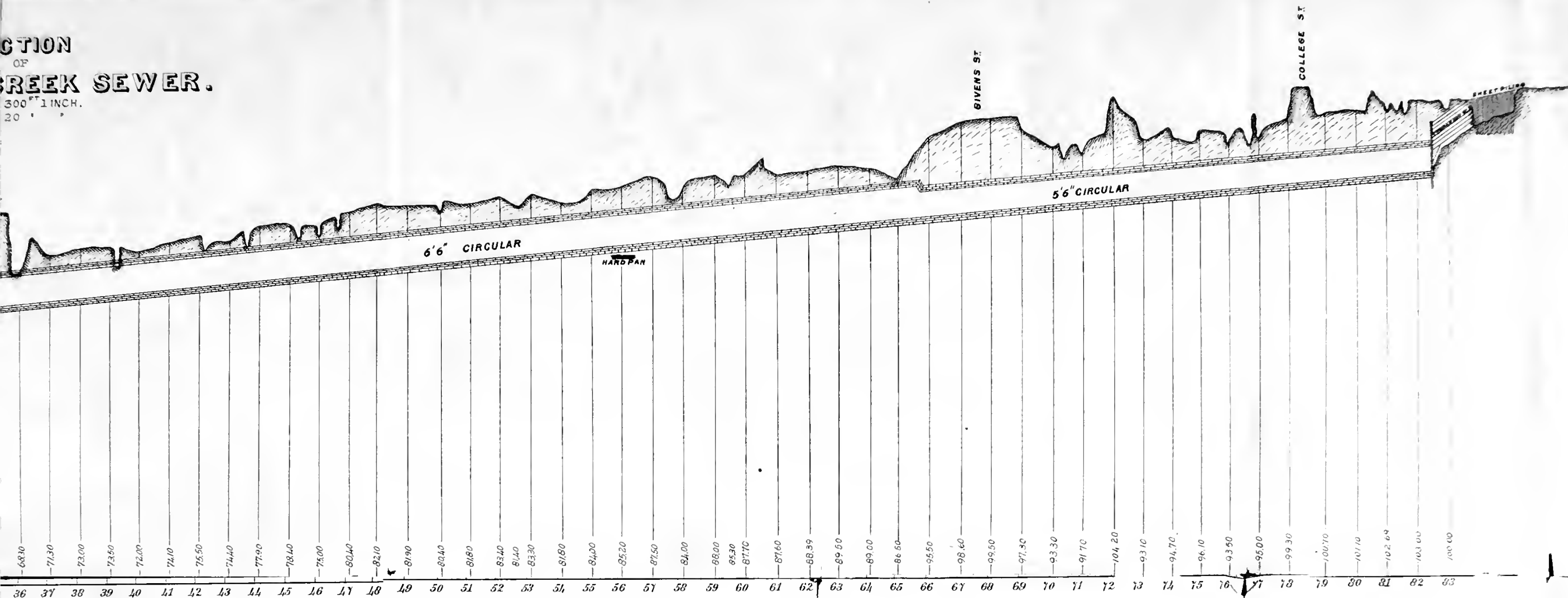
STONE HEAD
FOR
OUTLET INTO LAKE

FRONT ELEVATION

SIDE ELEVATION

CATCHWATER BASIN.

SECTION
OF
CREEK SEWER.
300 FT 1 INCH.
20 "



City Engineer's Office
Toronto March 3.

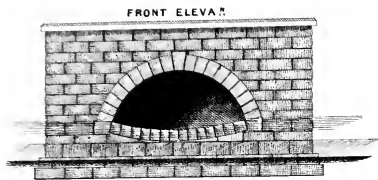
SECTION SHEWING
CONNECTION OF 7'6" WITH 6'6"

BASIN.

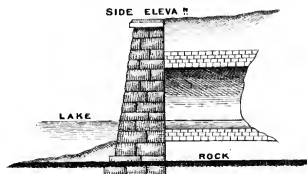
CROSS SEC.

LONG. SEC.

STONE HEAD
FOR
OUTLET INTO LAKE



SIDE ELEVATION



CATCHWATER BASIN.

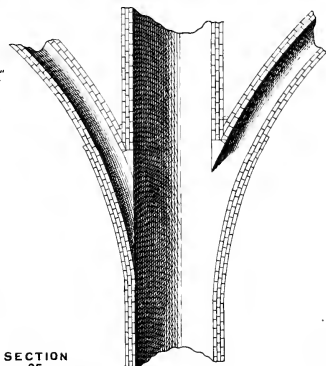
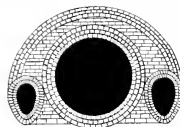
CROSS SECTION



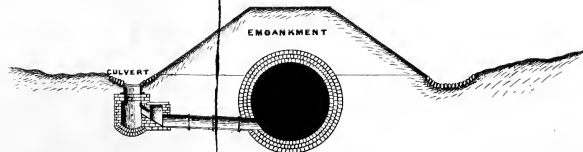
PLAN



SECTION
OF
BELLMOUTH FOR 7.6 3.2 AND 3.6x24"



SECTION
OF
SEWER
UNDER EMBANKMENT

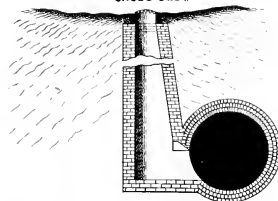


DETAILS OF THE GARRISON CREEK SEWER.

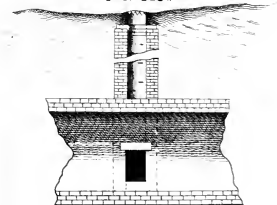
SCALE 8 ONE FOOT

MANHOLE

CROSS SECTION



LONG SECTION



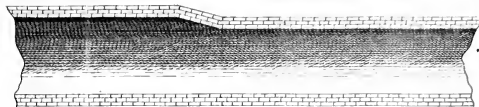
HWATER BASIN.



CROSS SECⁿ



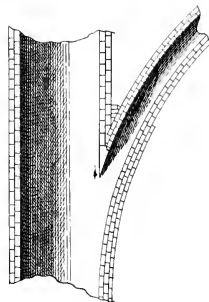
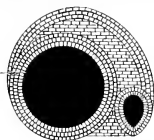
LONG^t SECⁿ



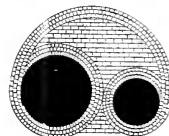
DETAILS
OF THE
N CREEK SEWER.

SCALE 3 ONE FOOT

SECTION
OF
BELLMOUTH FOR 7'6" AND 3'x2'

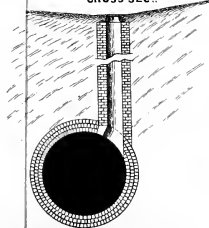


SECTION
OF
BELLMOUTH FOR 6'6" AND 4'6"



VENTILATING SHAFT

CROSS SECⁿ



LONG^t SECⁿ

